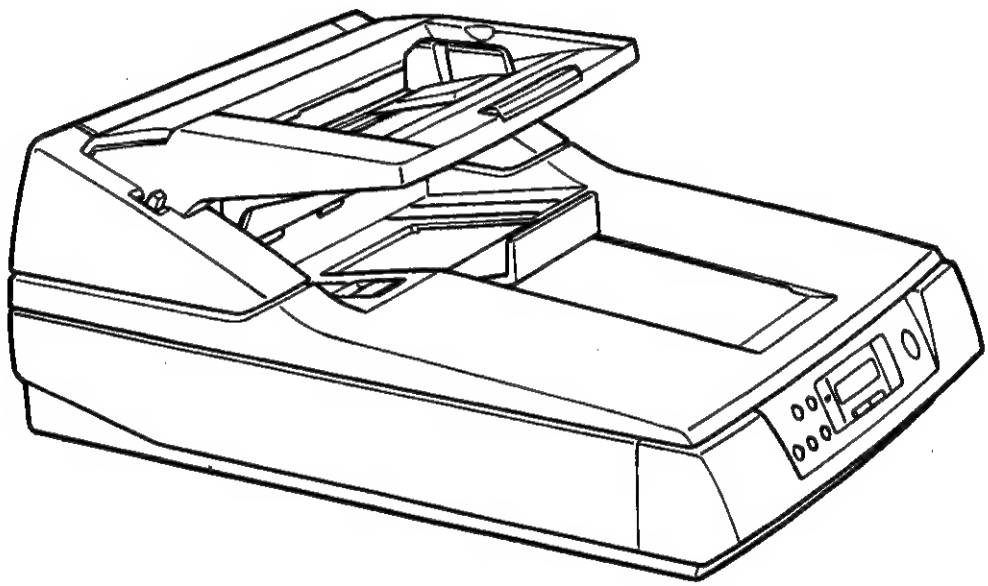
ORDER NO. KM79901330C0
G29

Service Manual

Scanner

KV-S6045W
KV-S6045WU
KX-S6040W
KX-S6040WU



⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

CONTENTS

SECTION 1 GENERAL PRECAUTIONS ..... 1 - 1
1.1 Safety Precautions ..... 1 - 1
1.2 Electrical Tests ..... 1 - 1
1.3 For Service Technicians ..... 1 - 1
SECTION 2 SPECIFICATIONS ..... 2 - 1
SECTION 3 COMPONENT IDENTIFICATION ..... 3 - 1
SECTION 4 INSTALLATION ..... 4 - 1
4.1 Installation ..... 4 - 1
4.2 Minimum Space Requirements ..... 4 - 2
4.3 SIMM Module Extension ..... 4 - 2
4.4 Installing SIMM Modules ..... 4 - 3
4.5 Installing the SCSI Board ..... 4 - 3
4.6 Connecting the Unit to a Host Computer ..... 4 - 6
4.7 LCD Settings ..... 4 - 7
SECTION 5 SECTIONAL VIEWS ..... 5 - 1
SECTION 6 MECHANICAL FUNCTION ..... 6 - 1
6.1 Paper Feed Mechanism ..... 6 - 1
6.2 Manual Feed Mode ..... 6 - 2
6.3 Paper Feed Roller/Hopper Lift Drive Mechanism ..... 6 - 2
6.4 Hopper Lift Mechanism ..... 6 - 3
6.5 Optical Unit ..... 6 - 4
SECTION 7 MAINTENANCE ..... 7 - 1
7.1 Maintenance Chart ..... 7 - 1
7.2 Roller Cleaning/Paper Feed Roller, Separation Roller, Retard Roller ..... 7 - 2
7.3 Paper Cleaning/Conveyor Roller 1-5 ..... 7 - 3
7.4 Replacing Limited Life Parts ..... 7 - 4
SECTION 8 DISASSEMBLY INSTRUCTIONS ..... 8 - 1
8.1 Disassembly Flowchart ..... 8 - 1
8.2 Exterior ..... 8 - 2
8.3 Unit Components ..... 8 - 10
8.4 Circuit Board Assemblies ..... 8 - 20
SECTION 9 OPERATION ..... 9 - 1
9.1 Specification ..... 9 - 1
9.2 Operation-1 (User Mode) ..... 9 - 3
9.3 Operation-2 (Service Mode) ..... 9 - 3
9.4 Setting List ..... 9 - 4
9.5 Setting Operation (User Mode) ..... 9 - 6
9.6 Setting Operation (Service Mode) ..... 9 - 11
9.7 Error Code ..... 9 - 20
SECTION 10 TROUBLESHOOTING ..... 10 - 1
SECTION 11 BLOCK DIAGRAM ..... 11 - 1
SECTION 12 CIRCUIT BOARDS ..... 12 - 1
SECTION 13 SCHEMATIC DIAGRAM ..... 13 - 1
SECTION 14 PARTS LOCATION AND MECHANICAL PARTS LIST ..... 14 - 1
SECTION 15 REPLACEMENT PARTS LIST ..... 15 - 1

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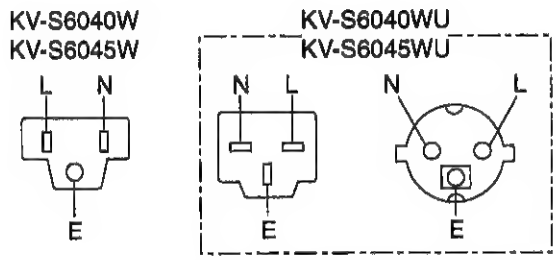
SECTION 1
GENERAL PRECAUTIONS

1.1 Safety Precautions

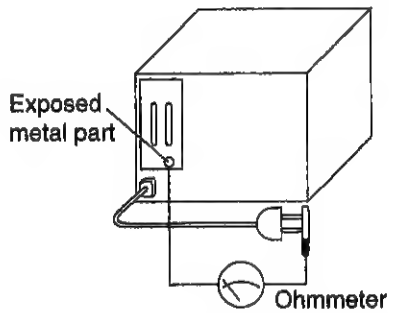
1) Before servicing, unplug the power cord to prevent electrical shock hazard.
2) When replacing parts, use only manufacturer's recommended components for safety.
3) Check the condition of power cord. Replace if wear or if damage is evident.
4) After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5) Before returning the serviced equipment to the customer, perform the following electrical tests to prevent a shock hazard.

1.2 Electrical Tests

1) Unplug the power cord and check for continuity between the earth ground connection on the plug and the metal cabinet. There should be zero ohm resistance found.
2) With the unit unplugged, short the AC Live-Neutral of the plug with a jumper wire.
3) Turn ON the power switch.
4) Measure the resistance value with an ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads, etc.
   Note: Some exposed parts may be isolated from the chassis by design. They read infinity.
5) If the measurement is less than 1 MΩ, a possibility for electric shock may exit.
   Note: This hazardous condition must be corrected before the unit is returned to the end user.



L: Live, N: Neutral E: Earth ground



Resistance > Approx. 1MΩ

1.3 For Service Technicians

ICs and LSIs are vulnerable to static electricity.
When repairing, the following precautions will help to prevent recurring malfunctions.

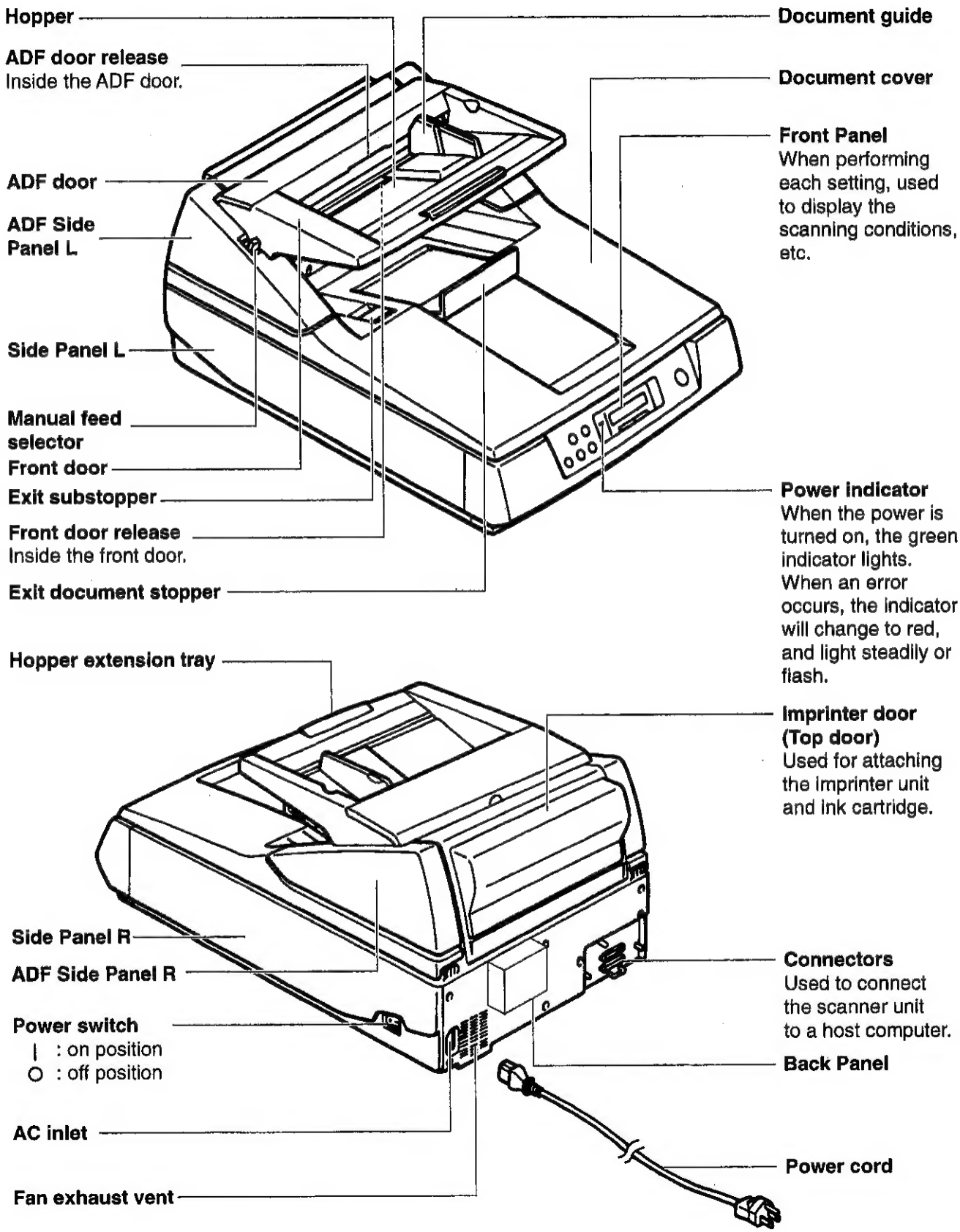
1) Cover the plastic parts with aluminum foil.
2) Ground the soldering irons.
3) Use a conductive mat on the worktable.
4) Do not grasp IC or LSI pins with bare fingers.

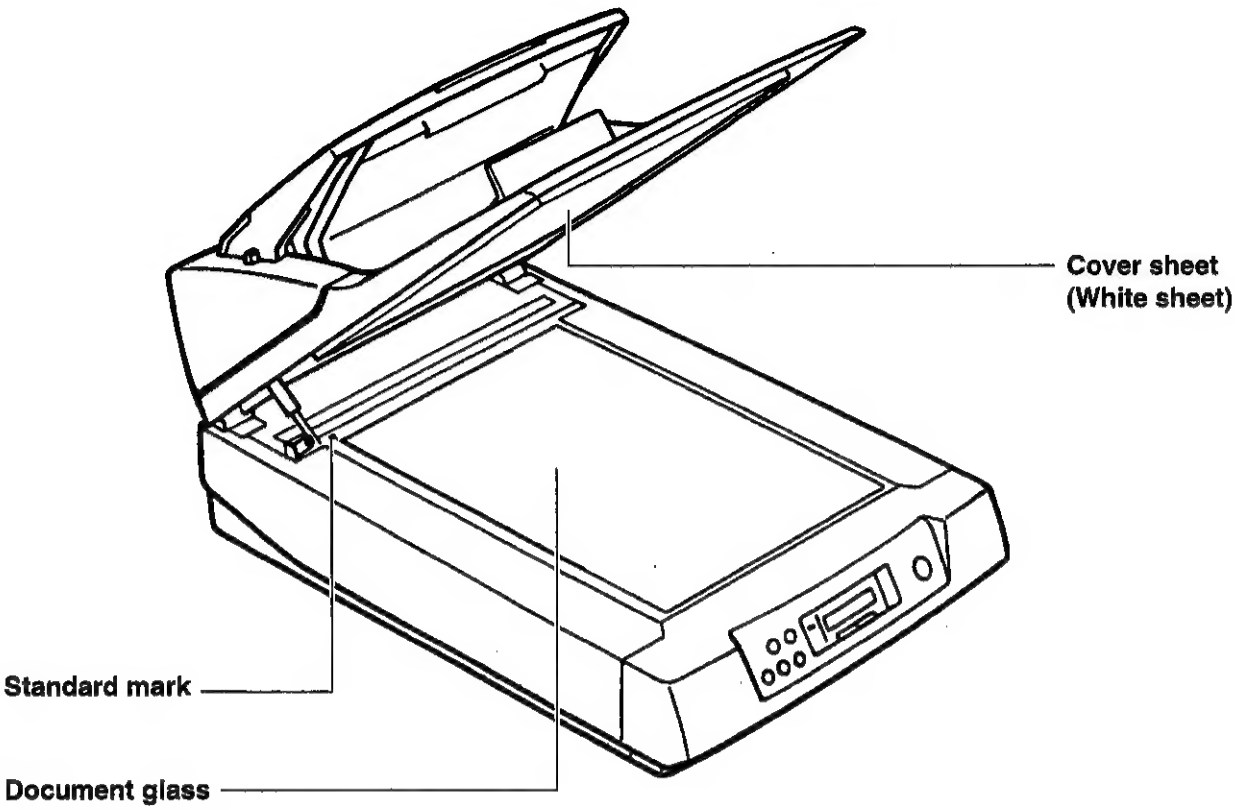
SECTION 2
SPECIFICATIONS

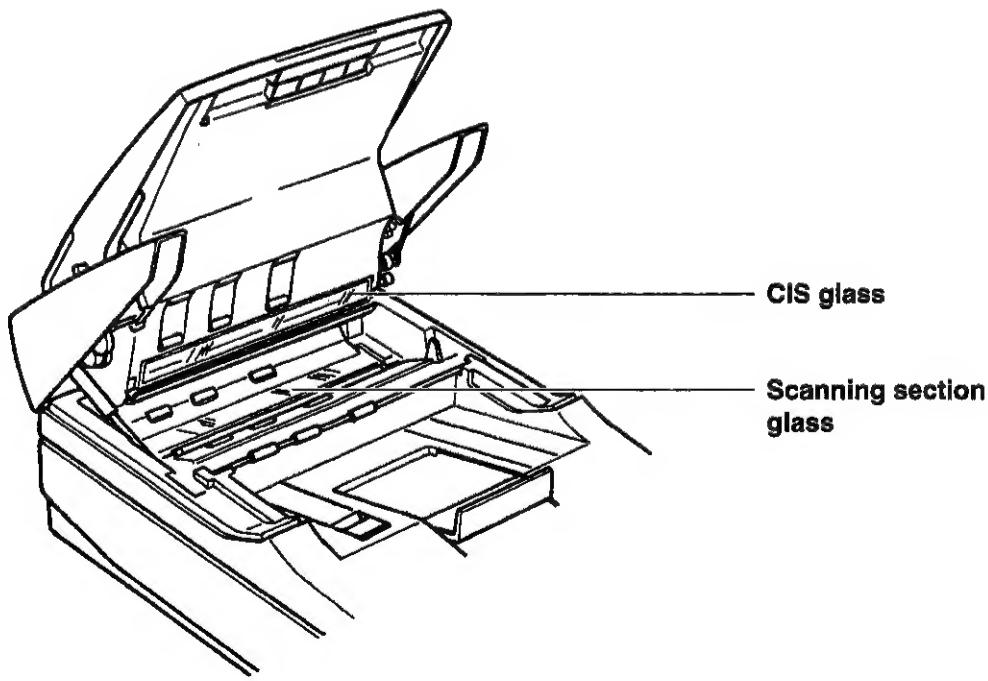
Item			Model No. KV-S6040W / KV-S6040WU	KV-S6045W / KV-S6045WU
Scanner	Scanning face		Simplex scanning	Duplex scanning
	Scanning method		CCD image sensor	ADF front side/Flatbed : CCD image sensor ADF back side : CIS (Contact Type Image Sensor)
	Readout speed	Flatbed	1.5 sec (1 paper, letter size, 200 dpi)	
		ADF	Simplex scanning : Approx. 45 sheets/min. (Letter, fed lengthwise, 200 dpi) Duplex scanning : Approx. 41 sheets/min. (KV-S6045W only) (Letter, fed lengthwise, 200 dpi)	
	Resolution	Flatbed/ ADF	Main scanning direction : 100~600 dpi (1 dpi step) Sub-scanning direction : 100~600 dpi (1 dpi step) The optical resolution is 400 dpi.	
	Tonal gradation		Binary mode, Grayscale mode (2/4/8 bit), 64-step gradation, (dither) mode, 64-step gradation (error diffusion) mode	
	Image control		Image emphasis, Automatic threshold, Automatic separation, Monochrome reversing, Automatic back control	
	Paper	Size for Flatbed	~298×432mm (11.7×17 in.)	
		Size for ADF	Scanning size 70×169mm (2.8×6.7 in.), and 106×148mm (4.2×5.8 in.) to 298×432mm (11.7×17 in.) Feeding size 70×169mm (2.8×6.7 in.), and 106×148mm (4.2×5.8 in.) to 305×432mm (12×17 in.)	
		Thickness for ADF	Single paper feeding : 0.05 to 0.15mm (2.0 to 5.9 mils) Continuous paper feeding : 0.06 to 0.15mm (2.4 to 5.9 mils) Note : 1 mil = 1/1000 in.	
		Weight for ADF	Single paper feeding : 40 to 127g/m² (10.6 to 34 lbs.) Continuous paper feeding : 50 to 127g/m² (13 to 34 lbs.)	
	Hopper capacity		200 sheets [64g/m² (17 lbs.) un used paper]	
Unit	External dimensions (Width×Depth×Height)		464×717×296mm (18.3×28.2×11.7 in.)	
	Mass (Weight)		30kg (66 lbs.)	
	Power requirement		AC100 – 120V, 50/60Hz (KV-S6040W/S6045W) AC220 – 240V, 50/60Hz (KV-S6040WU/S6045WU)	
	Power consumption	Maximum (Scanning)	1.8A (KV-S6040W/S6045W) 1.0A (KV-S6040WU/S6045WU)	
		Minimum (Standby)	0.5A (KV-S6040W/S6045W) 0.3A (KV-S6040WU/S6045WU)	
Operating Environment	Operating temperature and humidity		15°C to 30°C (59°F to 86°F), 30% to 80% RH	
Storage Environment	Storage temperature and humidity		0°C to 35°C (32°F to 95°F), 10% to 80% RH	
Option	Roller exchange kit (KV-SS044), Imprinter unit (KV-SS010), Red lamp option (KV-SS045), Roller cleaning paper (KV-SS03), Ink cartridge (KV-SS06)			

"Weight in pounds" of paper represents the weight of 500 [432×559mm (17×22 inches)] sheets.

SECTION 3
COMPONENT IDENTIFICATION




Cover sheet
(White sheet)
Standard mark
Document glass

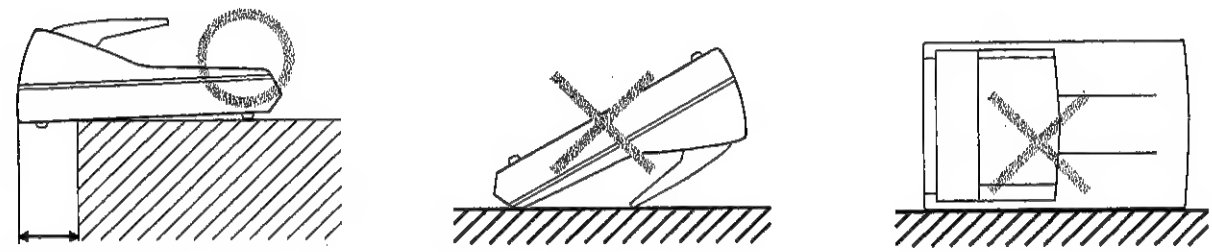

CIS glass
Scanning section
glass

SECTION 4
INSTALLATION

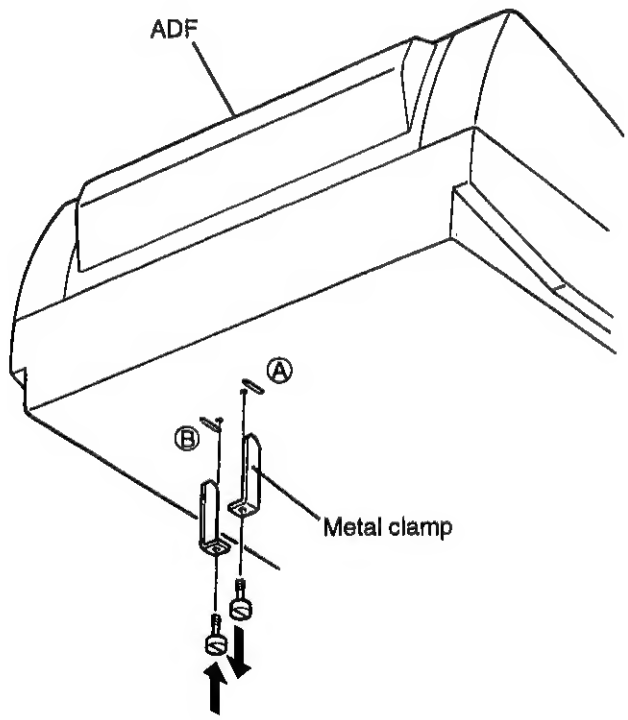
4.1 Installation

In order to ensure the scanner's safety while it is being transported, its optical unit is secured by a metal clamp. Once the scanner has been put in the place where it is to be installed, change the position of the metal clamp by following the steps outlined below.

1) Place the scanner is such a way that its left area protrudes by about 15cm (5.9") from the edge of a table.
   - Do not turn it upside down or stand it on its side.
   - When placing the scanner on a table, be careful not to extend beyond the edge 15cm (5.9"). Otherwise, the scanner may fall.

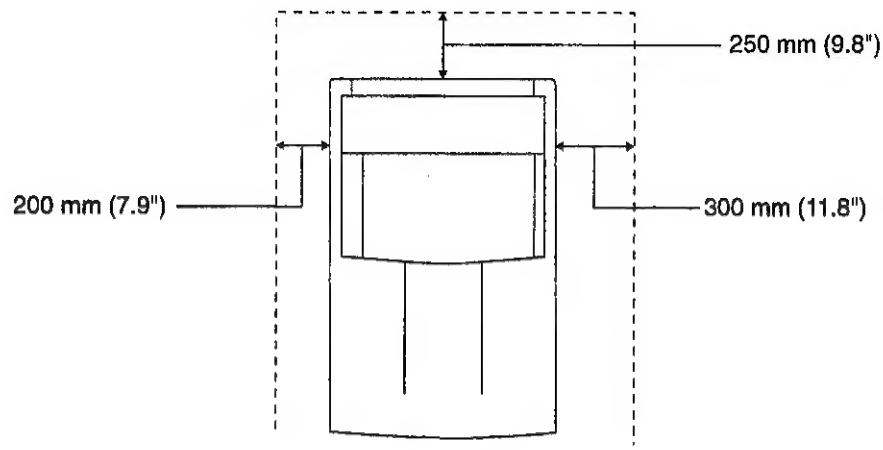


2) Remove the metal clamp on the bottom of the scanner from position Ⓐ and attach it at position Ⓑ instead.



4.2 Minimum Space Requirements

Be sure to maintain the recommended space requirements for proper ventilation.



4.3 SIMM Module Extension

A maximum of 64 MB extended memory may be required depending on the combination of the paper size, resolution and gray scale mode.
(For example, to scan a two-sided A4 size document with 600 dpi, binary, etc.)
To determine how much extended memory is required, refer to Table 1 on page 2 of the Panasonic Image Enhancement Technology Operation Manual.

* **Recommended SIMM**

1) 72 pin
2) 32 bit, NON PARITY
3) Access Time: 70 nsec or less
4) 8 MB, 16 MB or 32 MB may be used for a maximum total of 64 MB in 2 connectors.

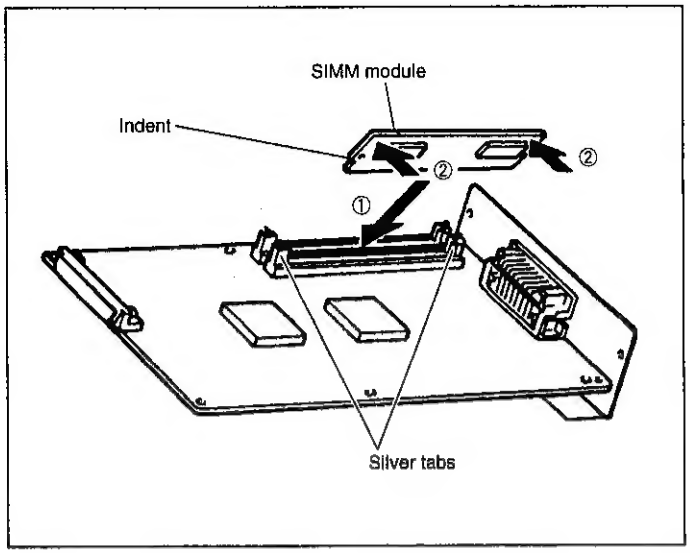
4.4 Installing SIMM Modules

Insert the SIMM modules into the connectors on the SCSI Board at an angle (①), then push them in the direction of the arrow holding both sides (②) until they click into place.

- **The SIMM can be attached to either of the 2 connectors.**
- **2 SIMM modules can be attached for the required size.**
  (EX.) 8 MB + 8MB = 16 MB
  *** Required Memory Size for each scanning mode is shown on 4-4 and 4-5 pages.**

Note:

- Be sure that the indent is to the left side, or the SIMM module will not be in the proper position.
- To remove the SIMM modules, press the silver tabs at both sides of the connectors.

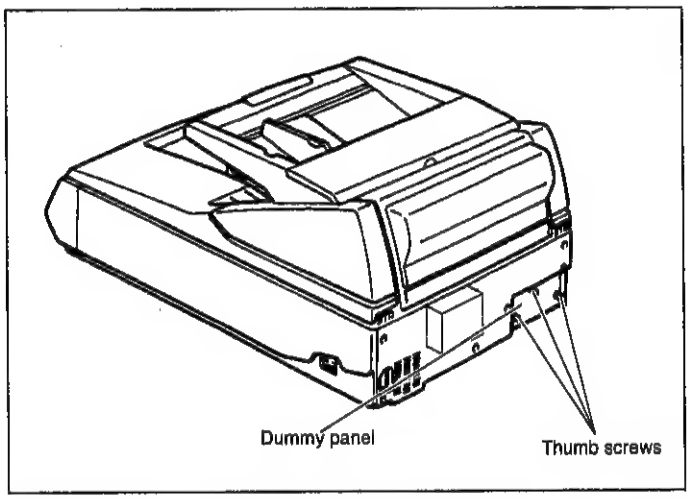


4.5 Installing the SCSI Board

1) Make sure the Power is **OFF**.

2) Remove the 3 thumb screws.
   - **These screws will be used in step 5.**

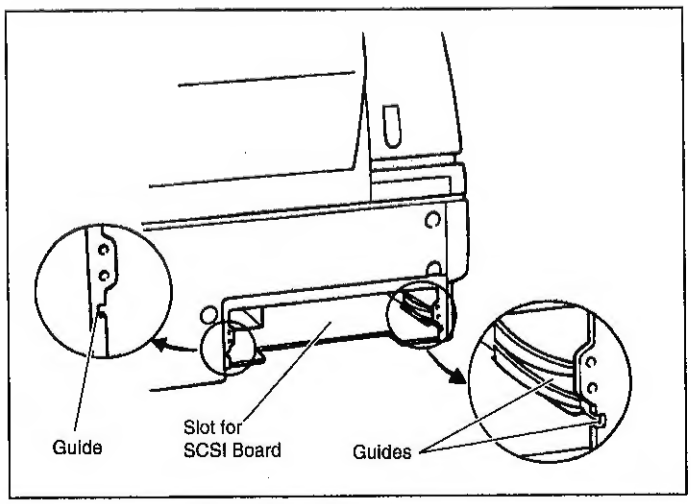
3) Remove the dummy panel.
   - **Store the dummy panel in a safe place for future use.**



4) Insert the SCSI Board into the unit along the rails and push it in firmly.

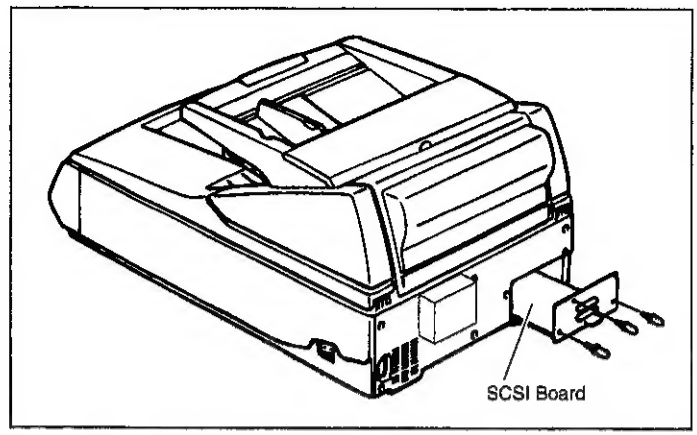
   - **Confirm that the SCSI Board plate is fully inserted until it firmly locks in place.**
   - **After removing the dummy panel, do not insert your hand into the slot for SCSI Board.**

Warning
Installing or removing the SCSI Board while the Scanner is ON may result in damage to the Board, as well as the Scanner.



5) Secure the SCSI Board with the 3 thumb screws.

6) Install the scanner driver software in your computer according to the enclosed manuals.



Additional Memory Size each scanning mode (MB)

Simplex/8bit

Size \ dpi	Resolution					
	100	200	300	400	500	600
A3	0	0	16	24	40	64
A4	0	0	8	8	16	32
A5	0	0	0	0	8	16
A6	0	0	0	0	0	8
B4 (JIS)	0	0	8	16	32	48
B5 (JIS)	0	0	0	8	16	24
B6 (JIS)	0	0	0	0	8	8
Double Letter	0	0	16	24	40	64
Legal	0	0	8	16	24	40
Letter	0	0	8	8	16	32

Duplex/8bit

Size \ dpi	Resolution					
	100	200	300	400	500	600
A3	0	8	32	56	–	–
A4	0	0	16	24	40	64
A5	0	0	8	8	16	32
A6	0	0	0	0	8	16
B4 (JIS)	0	8	24	40	64	–
B5 (JIS)	0	0	8	16	32	48
B6 (JIS)	0	0	0	8	16	24
Double Letter	0	8	32	56	–	–
Legal	0	8	16	32	56	–
Letter	0	0	16	24	40	64

Simplex/4bit

Size \ dpi	Resolution					
	100	200	300	400	500	600
A3	0	0	8	8	16	32
A4	0	0	0	0	8	16
A5	0	0	0	0	0	8
A6	0	0	0	0	0	0
B4 (JIS)	0	0	0	8	16	24
B5 (JIS)	0	0	0	0	8	8
B6 (JIS)	0	0	0	0	0	0
Double Letter	0	0	8	8	16	32
Legal	0	0	0	8	8	16
Letter	0	0	0	0	8	16

Duplex/4bit

Size \ dpi	Resolution					
	100	200	300	400	500	600
A3	0	0	16	24	40	64
A4	0	0	8	8	16	32
A5	0	0	0	0	8	16
A6	0	0	0	0	0	8
B4 (JIS)	0	0	8	16	32	48
B5 (JIS)	0	0	0	8	16	24
B6 (JIS)	0	0	0	0	8	8
Double Letter	0	0	16	24	40	64
Legal	0	0	8	16	24	40
Letter	0	0	8	8	16	32

Simplex/Binary

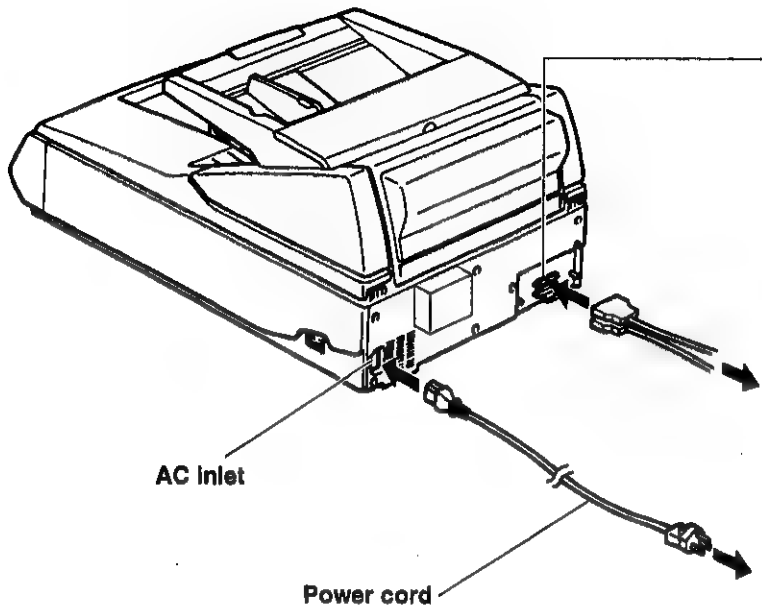
Size \ dpi	Resolution					
	100	200	300	400	500	600
A3	0	0	0	0	0	8
A4	0	0	0	0	0	0
A5	0	0	0	0	0	0
A6	0	0	0	0	0	0
B4 (JIS)	0	0	0	0	0	0
B5 (JIS)	0	0	0	0	0	0
B6 (JIS)	0	0	0	0	0	0
Double Letter	0	0	0	0	0	8
Legal	0	0	0	0	0	0
Letter	0	0	0	0	0	0

Duplex/Binary

Size \ dpi	Resolution					
	100	200	300	400	500	600
A3	0	0	0	0	8	16
A4	0	0	0	0	0	8
A5	0	0	0	0	0	0
A6	0	0	0	0	0	0
B4 (JIS)	0	0	0	0	8	8
B5 (JIS)	0	0	0	0	0	0
B6 (JIS)	0	0	0	0	0	0
Double Letter	0	0	0	0	8	16
Legal	0	0	0	0	0	8
Letter	0	0	0	0	0	8

4.6 Connecting the Unit to a Host Computer

Please refer to the "Installation Instructions for the SCSI Board and SIMM Module" enclosed with the unit to install the SCSI Board.



Connectors
The following procedure is required to connect the scanner unit to a host computer.
- With the SCSI Board:
  SCSI connector (2 ports)
  For the SCSI ID and terminator settings, please refer to following pages.

To PC or another SCSI device

AC inlet

Power cord

AC outlet
- KV-S6040W/S6045W:
  AC100-120V, 50/60 Hz
- KV-S6040WU/S6045WU:
  AC220-240V, 50/60 Hz

Caution:
Set the power switch on the scanner and on the host computer to OFF before connecting the interface cable. Use only with the power cord that is supplied by the manufacturer.

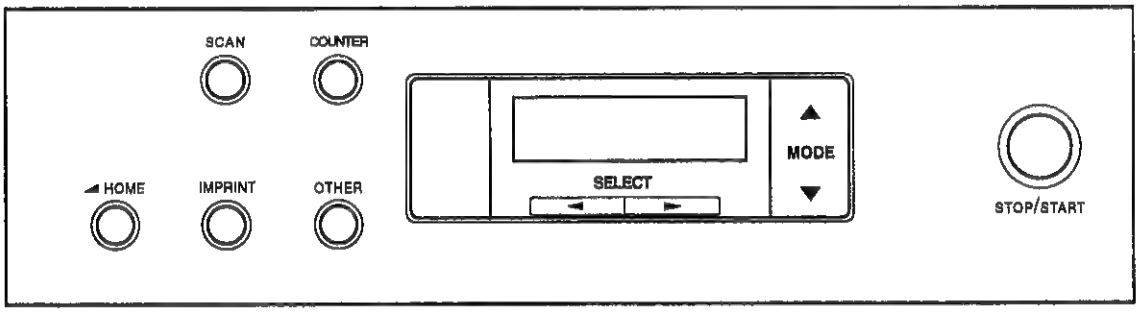
4.7 LCD Settings

Before scanning the document, perform the preferred settings on the display. Setting information and scanner conditions are shown on the display.

R	e	a	d	y										

After scanning, the counter amount will be displayed.

Display panel and keys



SCAN : Press to enter the scanning setting menu.

COUNTER : Press to enter the counter setting menu.

IMPRINT : Press to enter the imprinter setting menu.

OTHERS : Press to enter other setting menu.

HOME : Press to exit from the setting section and return to the ready status. Also used to change the display language.

STOP/START : Used to stop or start scanning a document.

: Up to 32 characters can be displayed during scanning or setting.

▲ : Press to advance to the next mode in the selected menu.

▼ : Press to return to the previous mode in the selected menu.

▶ : Press to advance to the next value in the selected mode.

◀ : Press to return to the previous value in the selected mode.

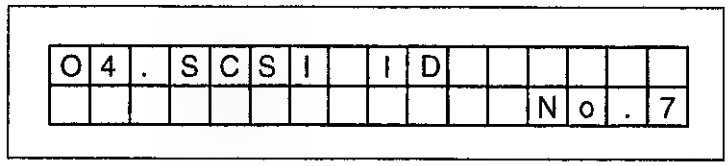
1) Press the OTHERS key.
Enters setting modes other than SCAN, COUNTER, or IMPRINT and displays the version.

0	1	.	V	e	r	s	i	o	n					
						M	1	.	0	0	F	1	.	0	0

2) Press the MODE key.
Press the MODE key [▲] to display the SCSI ID, which is the fourth setting.

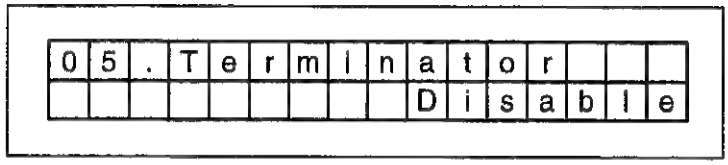
0	4	.	S	C	S	I		I	D					
											N	o	.	6

3) Press the SELECT [◀] key or [▶] key to select the desired setting.
The [▶] key moves to the next ID as shown below.
The [◀] key moves to the previous ID.

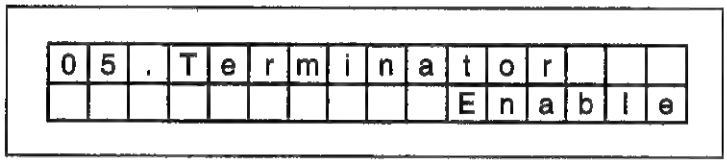


→0→1→2→3→4→5→6→7→

4) Press the MODE key [▲] to switch to the terminator setting.
To activate the SCSI ID settings, press the HOME key to return to "READY", then turn the unit off and on.



5) Press the SELECT [◀] key or [▶] key to select the desired setting.
The [▶] key moves to the next content as shown below.
The [◀] key moves to the previous content.



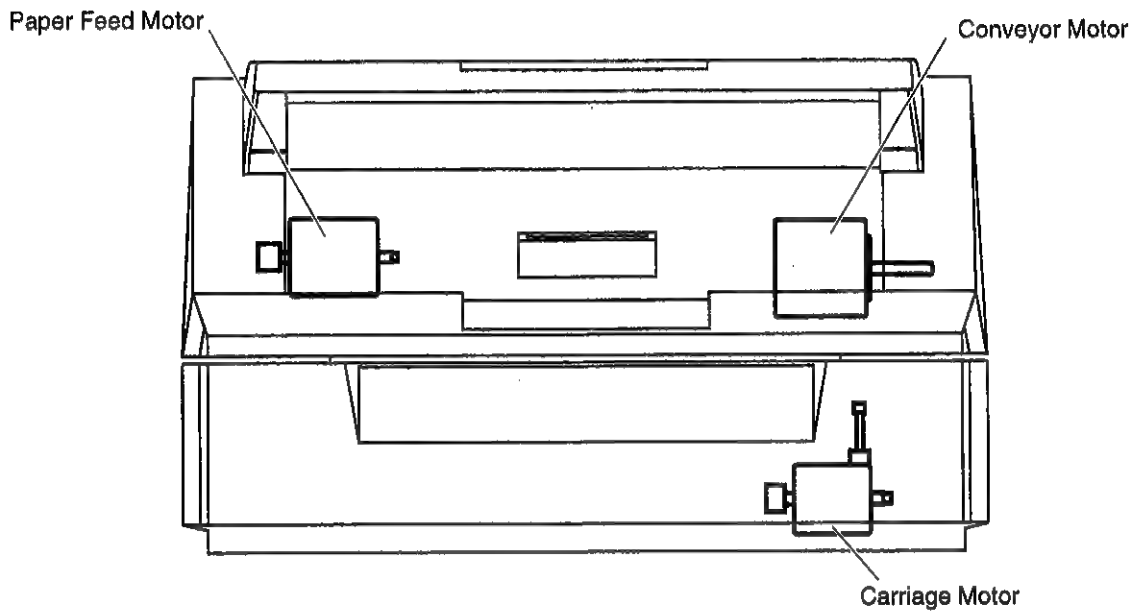
→Disable→Enable→

Note:

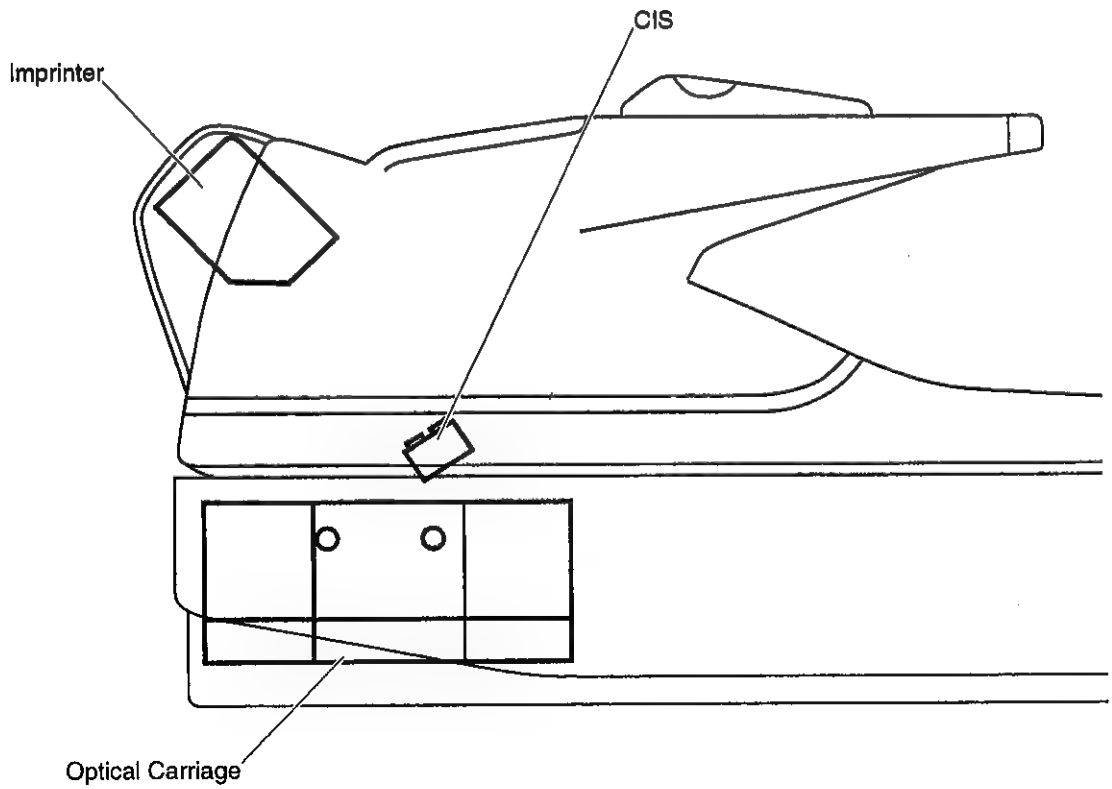
- In case Scanner is located to terminal position on SCSI bus physically, this operation should be set to "Terminator Enable".
- Setting the SCSI ID will be activated after turning the power OFF and turning it ON again.
- Setting the terminator will be activated after turning the power OFF and turning it ON aglan.

SECTION 5
SECTIONAL VIEWS

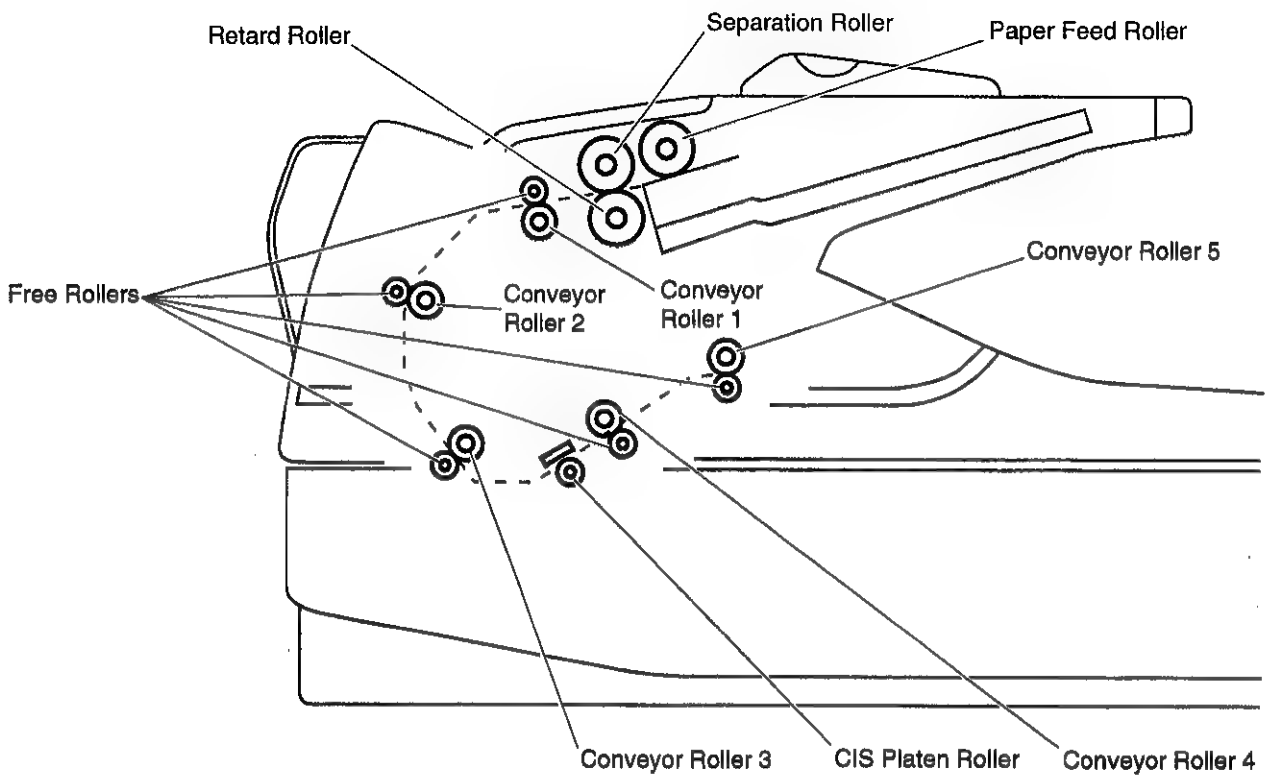
Motors
(Front View)



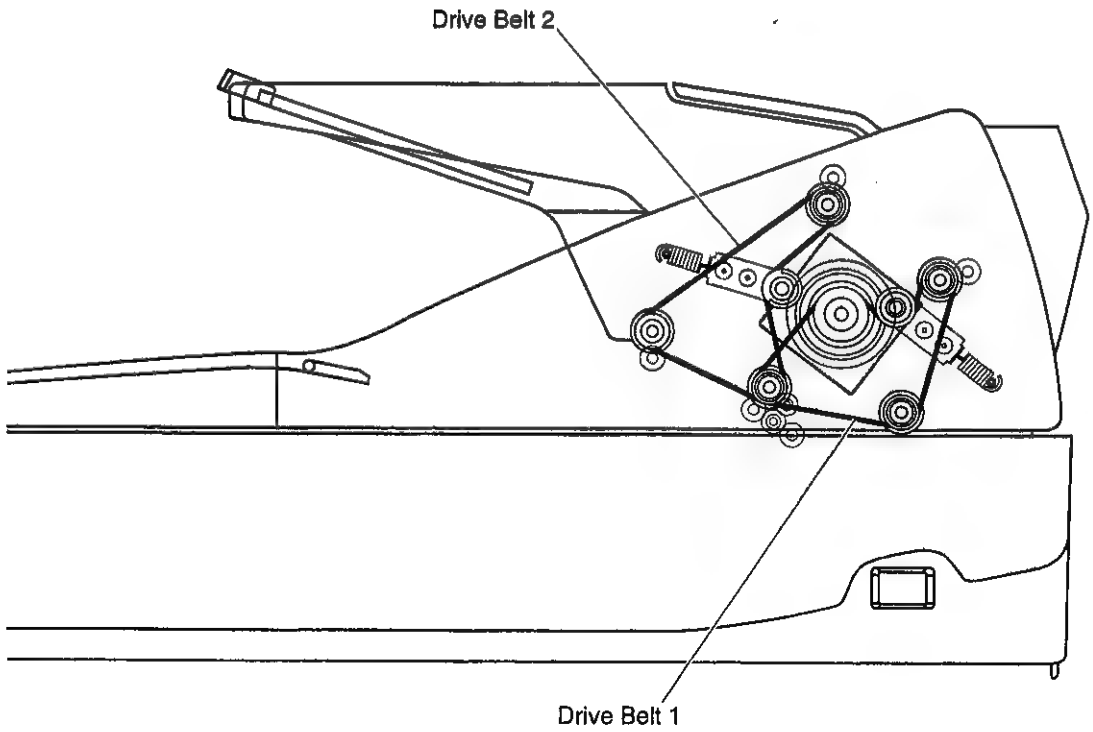
Optical Units and Imprinter



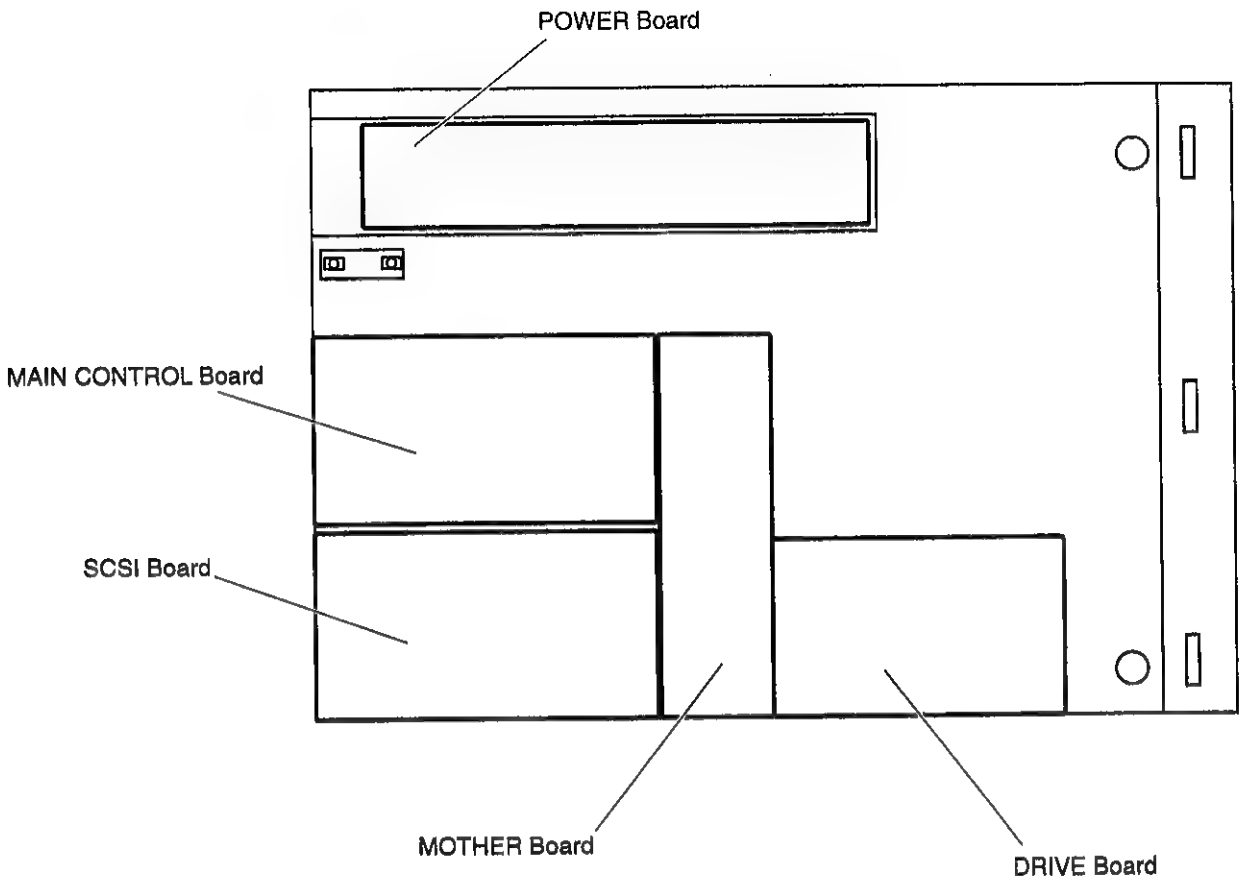
Rollers

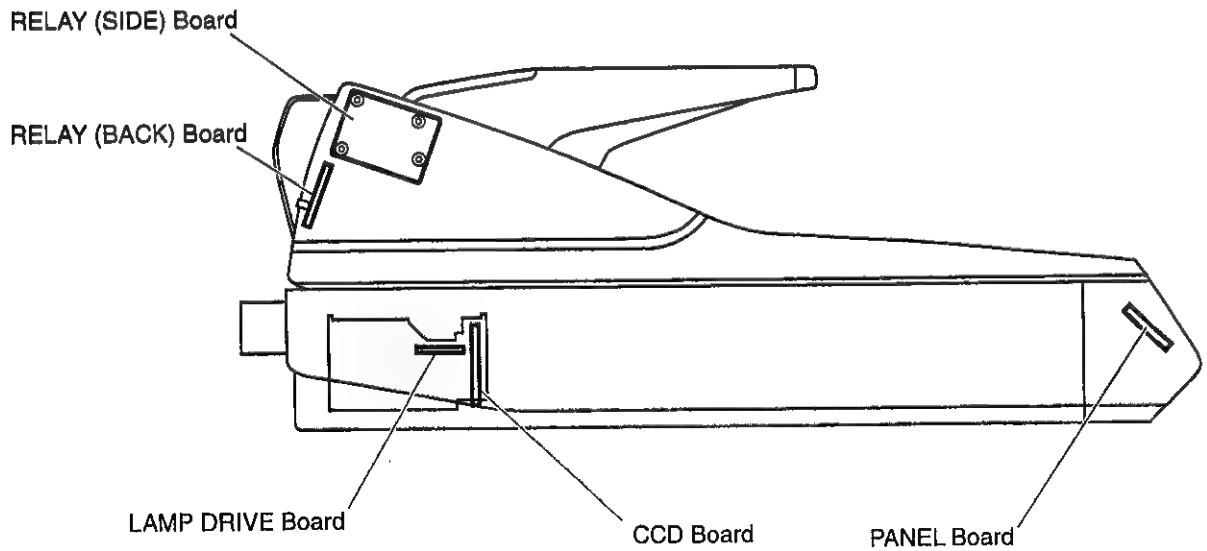


Drive Belts

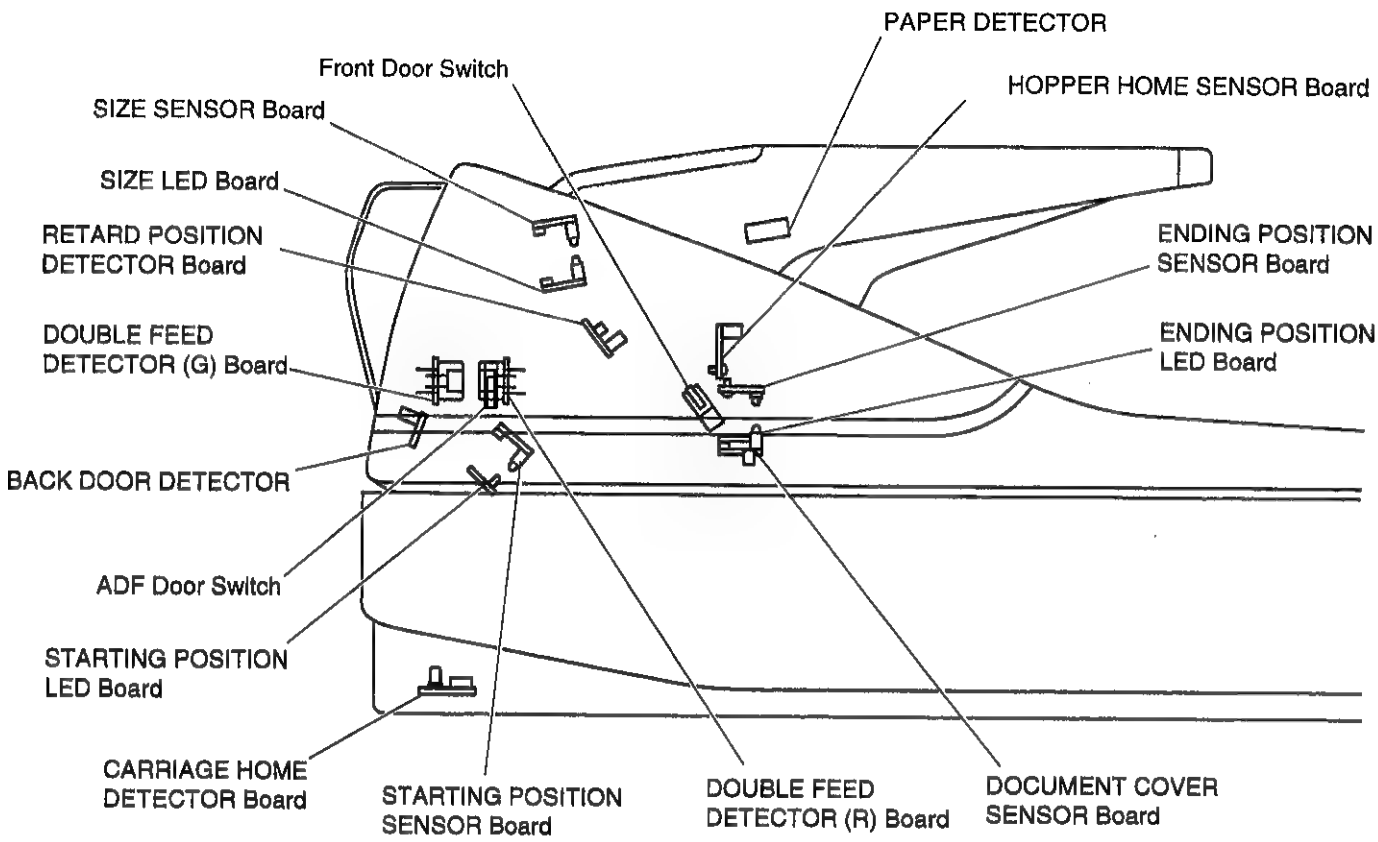


Circuit Boards





Sensor Boards and Switches



SECTION 6
MECHANICAL FUNCTION

6.1 Paper Feed Mechanism

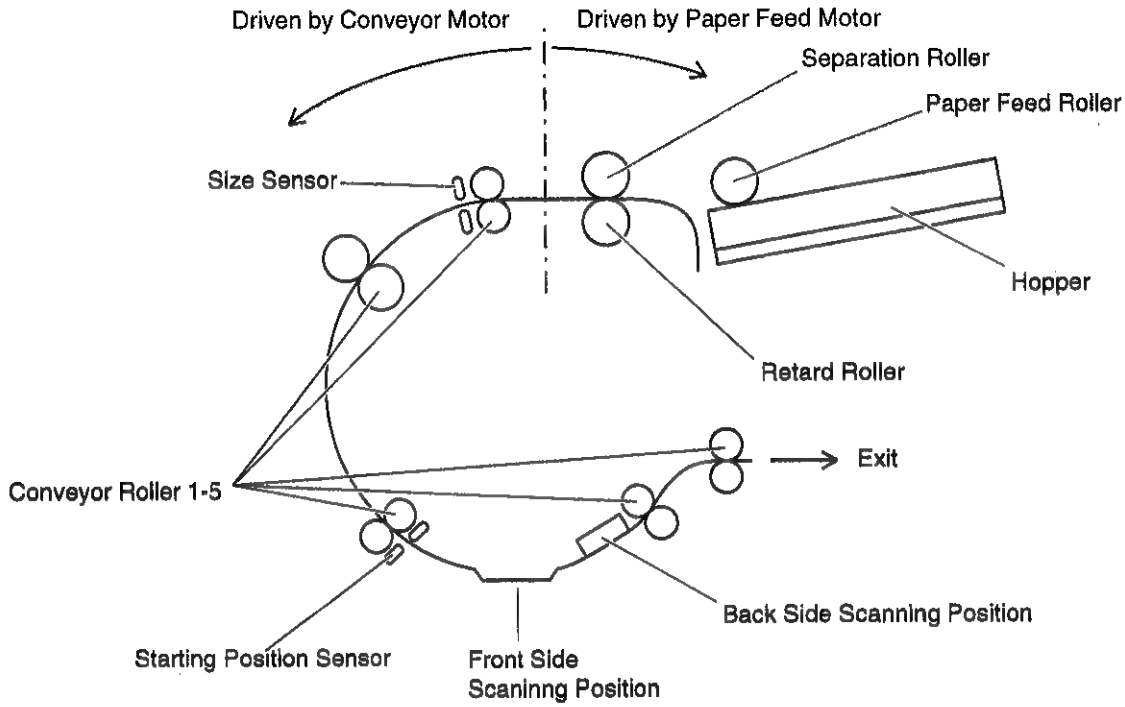


Fig. 6-1

(1) When the paper is set on the Hopper, and the scanning command is issued from PC, the Hopper rises and the paper will be brought into contact with Paper Feed Roller.
(2) The Conveyor Motor activates to rotate the Conveyor Roller 1 through 5.
(3) The Paper Feed Motor activates to rotate the Paper Feed and Separation Rollers. The Paper Feed Roller picks up a page. A spring attaches the Retard Roller to the Separation Roller. The supporting axis of the Retard Roller is connected to the fixed gear through the torque limiter and the timing belt's gear train. In case there is only one page picked up between Separation Roller. The Retard Roller rotates in the direction which the Separation Roller rotates by allowing the Retard Roller to slip on the torque limiter. If there are two or more pages between Separation Roller and Retard Roller, torque limiter is set so that the load of the torque limiter increases accordingly, to allow slip friction for each pages. As a result of this, only the top page passes through the conveyor section, and the additional pages are prevented from passing through.

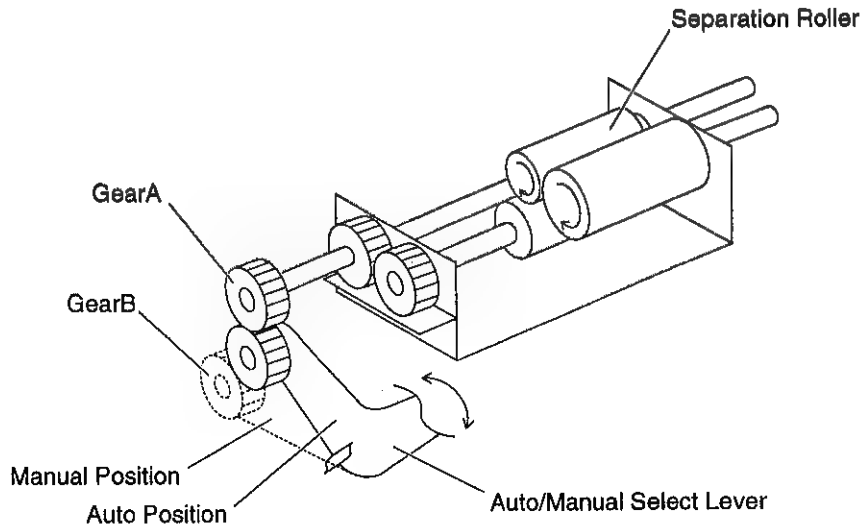


Fig. 6-2

(4) When the top of the paper passes through on Size Sensor via Separation / Retard Roller and Conveyor Roller, Paper motor stops.
(5) When the top of the first page reaches to Scanning Position, CCD sensor and or CIS is driven to scan. And by using the above sensors, scanning process starts.
(6) When the end of the paper passes through on CIS(Back Side Scanning Position), Conveyor Motor stops, Scanner waits for next scanning start command from PC. At this time, if no following paper to scan, the current scanning paper is gone out.
(7) When the end of the first page passes through on the Size Sensor on the continuous scanning mode, Paper Feed Motor starts again after an interval of approx. 100mm on duplex mode(approx.60mm on simplex mode)and feed the following paper through the conveyor section.
(8) Repeat the above (3) to (8).
(9) After finishing all scanning process, Hopper goes down to the original position and the series of Scanning sequence ends.

6.2 Manual Feed Mode

(1) For multiple sheet's scanning, there is possibility that the first page and the second page will be separated, and the paper will be torn if paper is scanned while the Retard Roller is locked.
(2) When Auto/Manual Select Lever is set to "Auto", the Gear fixed with lever is connected to the Retard Roller. Thereby, The Retard Roller is locked through torque limiter.
(3) When Auto/Manual Selector Lever is set to " Manual", the Gear B fixed with lever is free from Gear A connected to the Retard Roller. In this case, the Retard Roller operates as free roller for the Separation Roller, and does not operate paper separation function because the Retard Roller rotates independently.

6.3 Paper Feed Roller/Hopper Lift Drive Mechanism

(1) Paper Feed Motor drives either Paper Feed Roller mechanism or Hopper Lift mechanism by selecting the direction of rotation.
(2) The drive system is shown on Fig.6-3.
(a) The gear block ① belongs to Drive system for Paper Feed Roller and Separation Roller.
(b) The gear block ② belongs to Drive system for Hopper Lift.
(c) The gear block ③ belongs to Drive system for Paper Feed Roller, Separation Roller, and Hopper Lift in common.

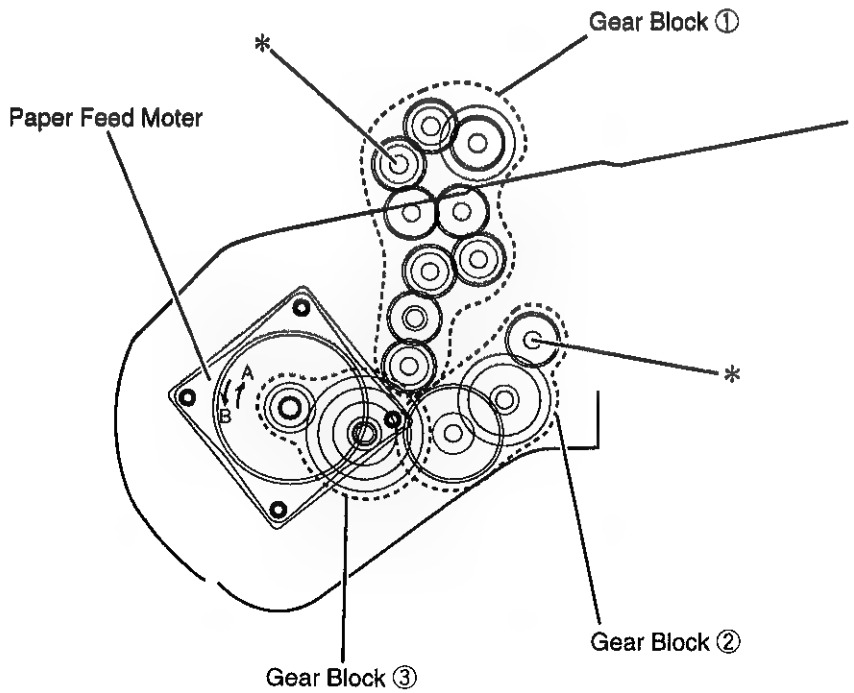


Fig. 6-3

(3) When the Paper Feed Motor drives in the direction of arrow A, Paper Feed Roller is activated, based on Output axis. On the other hand, when the Paper Feed Motor drives in the direction of arrow B, Hopper lift mechanism is activated. Gears marked with " * " on Each Gear block have one way clutches. when the gears are activated to rotate against the direction of normal rotation, the one way clutches slipped and the series of rotation are not transmitted to the mechanical block.

6.4 Hopper Lift Mechanism

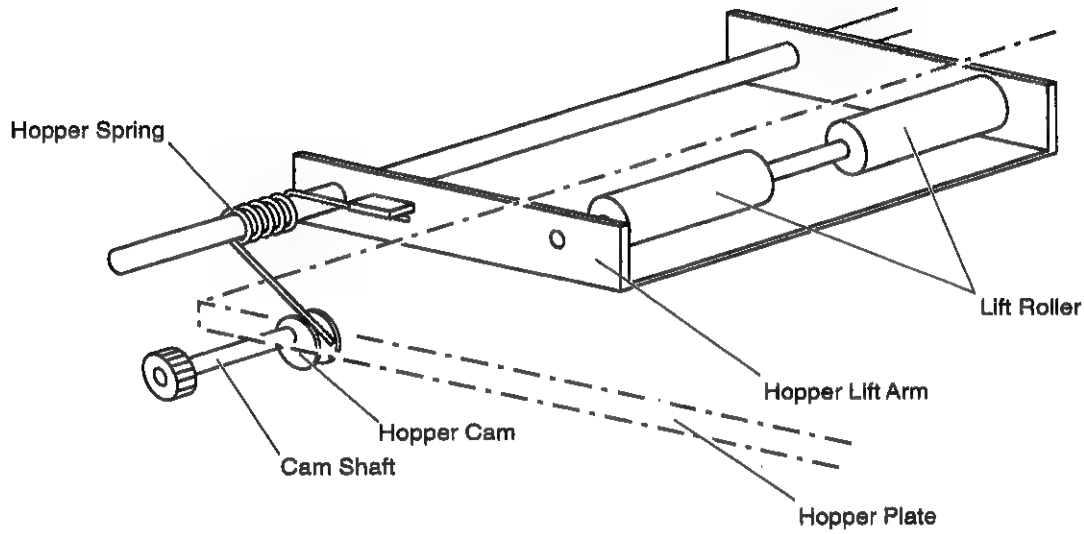


Fig. 6-4

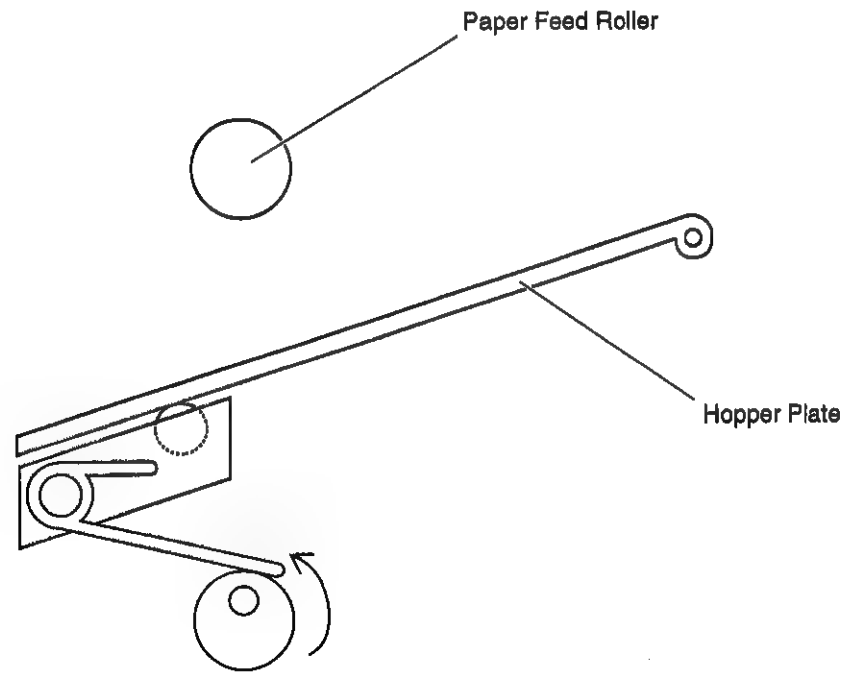


Fig. 6-5

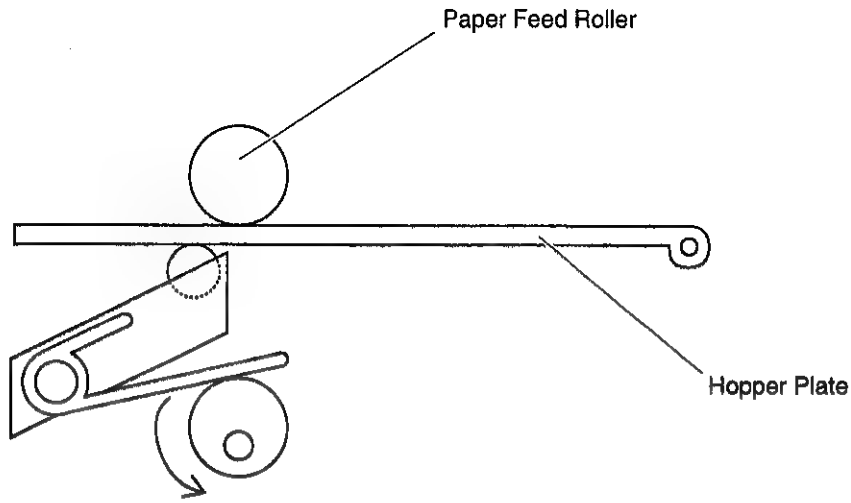


Fig. 6-6

(1) Hopper Plate is mounted on Lift Roller of Hopper Lift Arm.
(2) Hopper Lift Arm is supported by Hopper Cam through Hopper Spring.
(3) Hopper Cam is an eccentric type cam, and is connected to Hopper Lift Gear block mentioned in Fig. 6-3.
(4) When Hopper cam is in condition as shown in Fig. 6-5, the paper can be set.
(5) When the Hopper cam rotates in the direction of arrow as shown in Fig. 6-6, it pushes up Hopper spring, and enables to paper feeding by attaching Hopper Plate to Paper Feed Roller.
(6) And when the Hopper cam still more rotates in the direction of arrow, the cam rotates until the position as shown in Fig. 6-5, and Hopper Plate goes down.

6.5 Optical Unit

The light reflected from the paper surface is transmitted via mirrors A ➡ B ➡ C ➡ D ➡ E , and is transmitted to CCD surface through the lens at last.

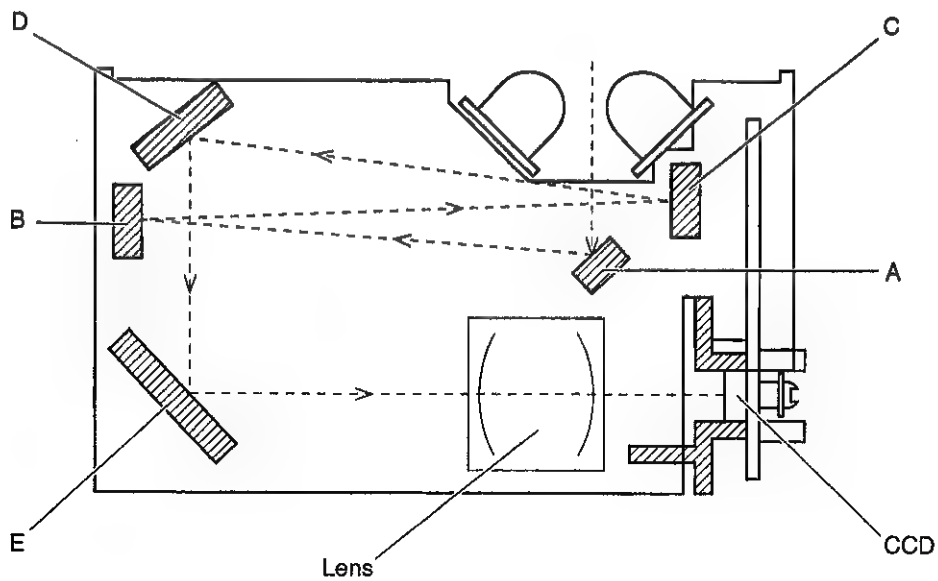


Fig. 6-7

SECTION 7
MAINTENANCE

7-1 Maintenance Chart

C: Clean R: Replace (x1000 sheets)

Description	Part No.	50	100	150	200	250	300
Paper Feed Roller	PBDRA0081Z	C	C	C	C	C	R
Separation Roller	PBDRA0082Z	C	C	C	C	C	R
Retard Roller	PBDRA0083Z	C	C	C	C	C	R
Conveyor Roller 1	PBDRA0084Z	C	C	C	C	C	C
Conveyor Roller 2	PBDRA0085Z	C	C	C	C	C	C
Conveyor Roller 3	PBDRA0085Z	C	C	C	C	C	C
Conveyor Roller 4	PBDRA0084Z	C	C	C	C	C	C
Conveyor Roller 5	PBDRA0084Z	C	C	C	C	C	C
ADF Target Glass	PBMDA0480Z	C	C	C	C	C	C
ADF White Sheet	PBHEA0103Z	C	C	C	C	C	C
Free Roller	PBDRA0029Z	C	C	C	C	C	C
CIS Platen Roller	PBDRA0086Z	C	C	C	C	C	C
Cold Ray Flourescent Lamp	CFX12AYG/36H	Lighting period 1000 hours					

Note : Whenever black line occurs on scanning image, clean ADF Target Glass, ADF White Sheet, and CIS Platen Roller, disregarding the above value.

7.2 Roller Cleaning / Paper Feed Roller, Separation Roller, Retard Roller

(1) Turn off the Power.
(2) Open the Front Door.
(3) Clean the surface of Paper Feed Roller and Separation Roller with cleaning paper.(KV-SS03)
(4) Clean the surfaces of Retard Roller with Cleaning Paper(KV-SS03), when Roller Cleaning message is indicated on the LCD (See Section 9).

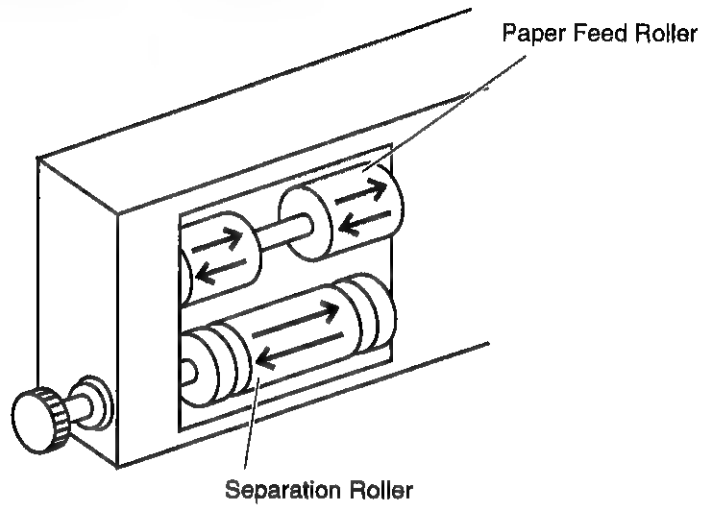


Fig. 7-1

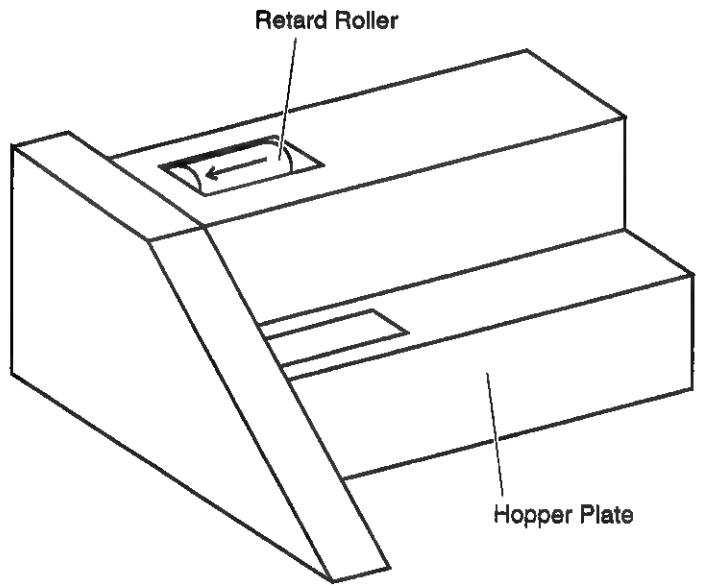


Fig. 7-2

Note : Clean any dirt from these rollers according to the arrows as shown in Fig.7-1 and Fig.7-2.

7.3 Paper Cleaning / Conveyor Roller 1-5

1) Conveyor Roller 1, 2
   ① Turn off the Power.
   ② Open the ADF Door.
   ③ Clean these rollers using the cleaning paper(KV-SS03) to wipe the dirt on the surface of the roller.

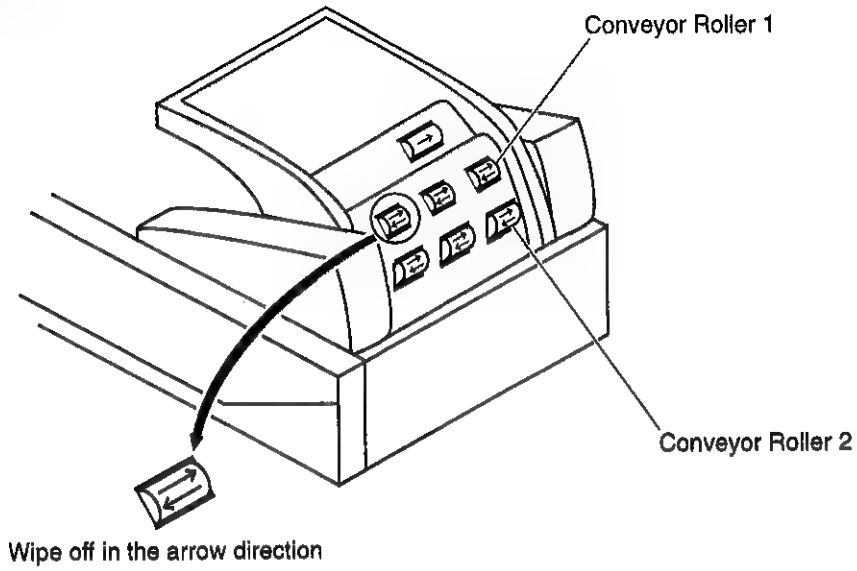


Fig. 7-3

2) Conveyor Roller 3, 4, 5
   ① Turn off the Power.
   ② Open the Front Door.
   ③ Clean these rollers using the cleaning paper (KV-SS03) to wipe the dirt on the surface of these roller. (same as cleaning the CIS, ADF white sheet, ADF Target Glass)

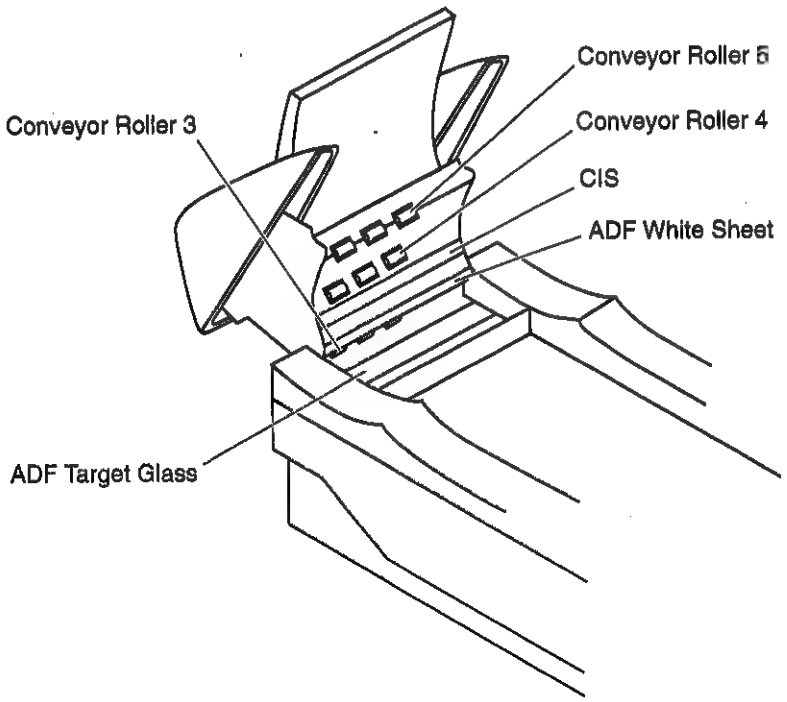


Fig. 7-4

7.4 Replacing Limited Life Parts

1) Paper Feed Roller, Separation Roller
   ① Turn off the Power.
   ② Open the Front Door.
   ③ Open the Paper Feed Conveyor.
   ④ Pull the gear side of Paper Feed Roller toward arrow ①.
   ⑤ Slide toward arrow ②.

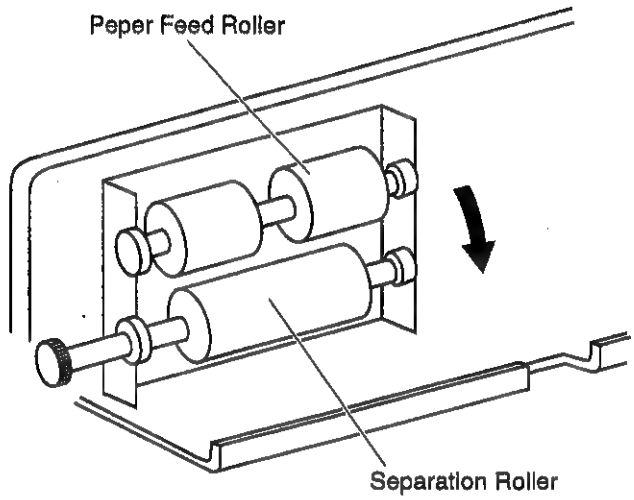


Fig. 7-5

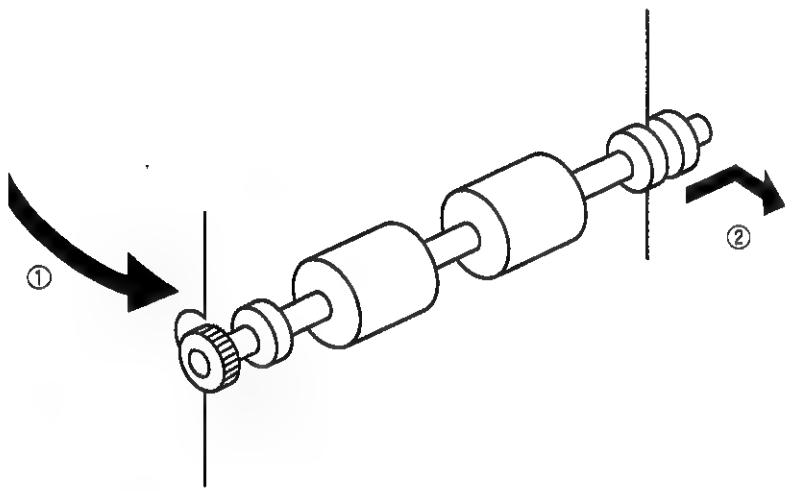


Fig. 7-6

2) Retard Roller

① Turn off the Power.
② Open the Front Door.
③ Open the Retard Conveyor.
④ Grip the Retard Roller and slide toward arrow ③.

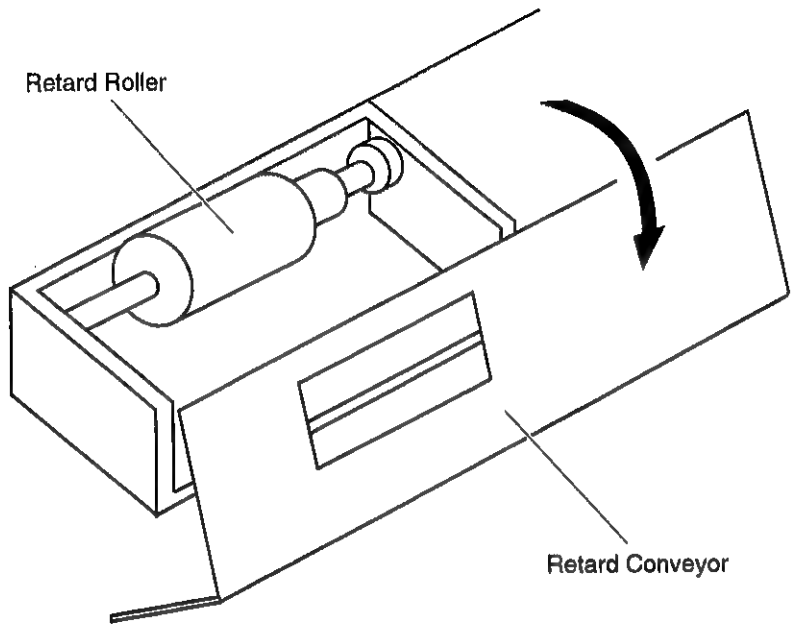


Fig. 7-7

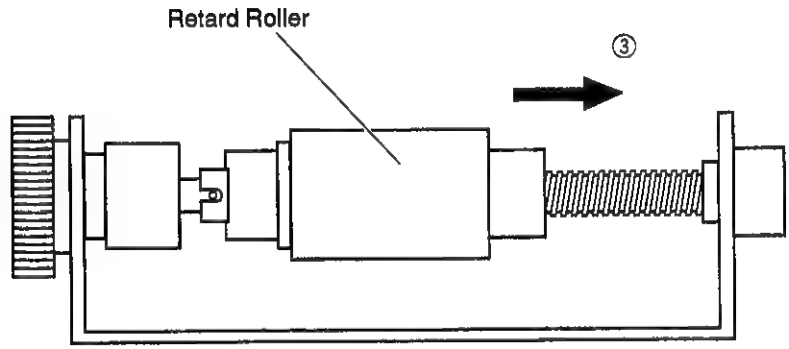


Fig. 7-8

SECTION 8
DISASSEMBLY INSTRUCTIONS

8.1 Disassembly Flowchart

The flowchart indicates disassembly items of the Covers, Unit Components and Circuit Board assemblies. When reassembling, perform the steps in the reverse order unless otherwise noted in Reassembling Notes.

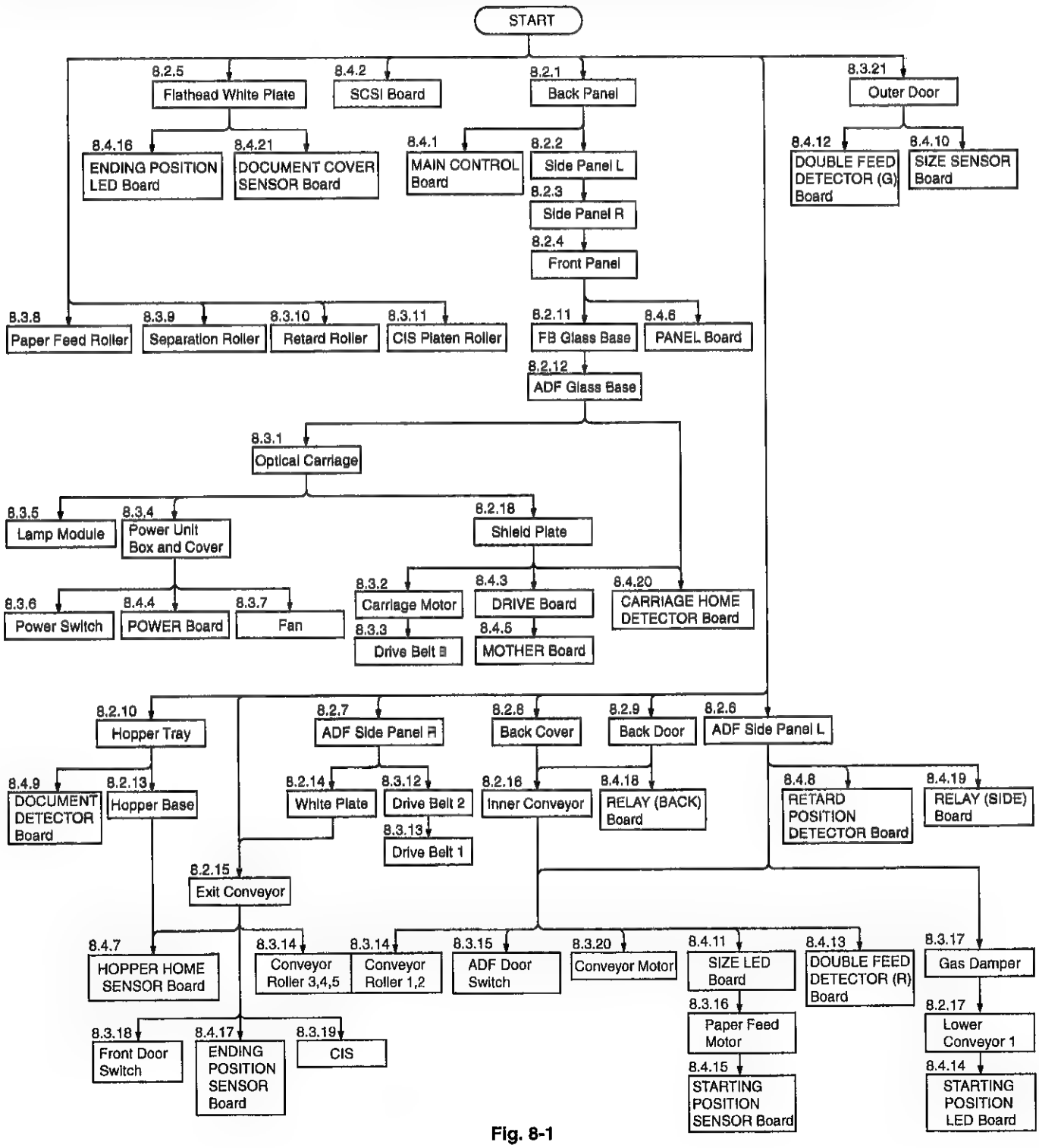


Fig. 8-1

8.2 Exterior

8.2.1 Back Panel

1) Remove 7 screws.

2) Remove the Back Panel.

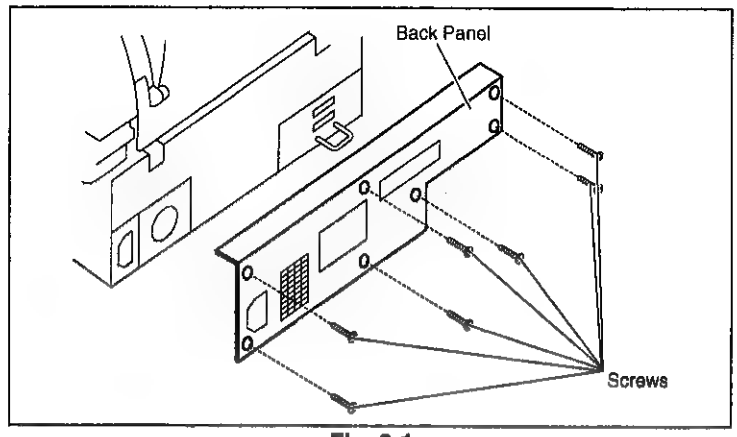


Fig. 8-1

8.2.2 Side Panel L

1) Remove Back Panel.
   (See 8.2.1)

2) Remove 3 screws.

3) Slide Side Panel L toward the back, as shown in Fig 8-2.

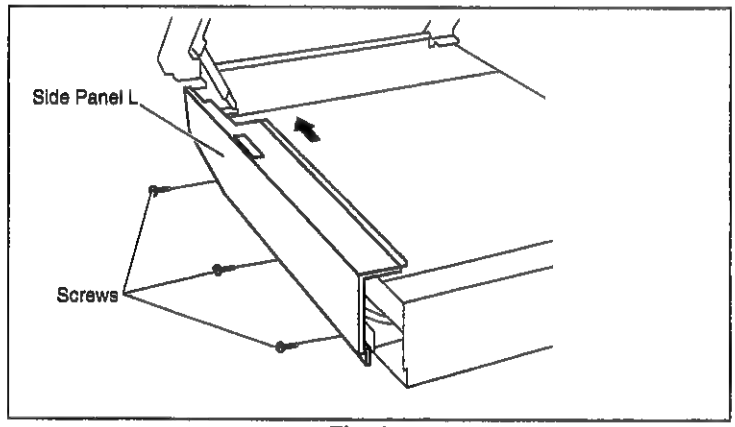


Fig. 8-2

4) Lift Side Panel L up, as shown in Fig. 8-3.

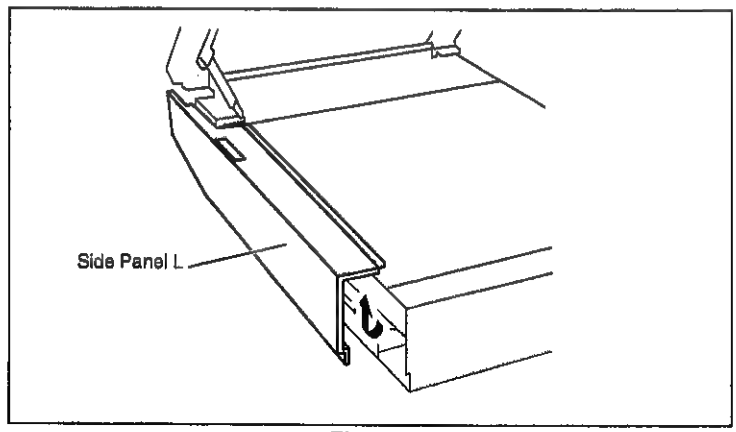


Fig. 8-3

5) Centralize the axis (fulcrum) of the lever and turn Side Panel L toward the right, as shown in Fig. 8-4. While turning, bring it down toward the inside (toward the left).

6) Detach the screw-fixed hook on the back of Side Panel L from the chassis, and remove later.

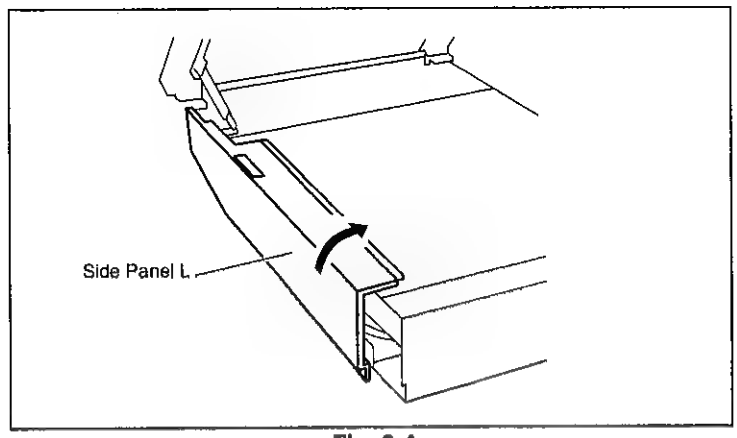


Fig. 8-4

8.2.3 Side Panel R

1) Remove Back Panel. (See 8.2.1)

2) Remove 3 screws.

3) Slide the Side Panel R backward as shown in Fig. 8-5.

4) Remove the Side Panel R.

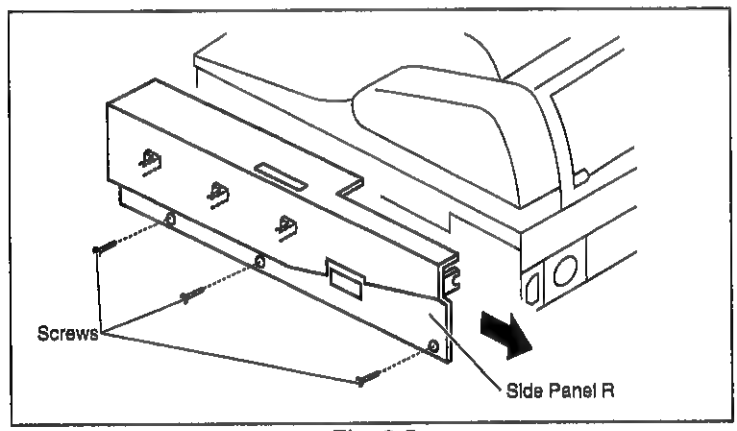


Fig. 8-5

8.2.4 Front Panel

1) Remove the Side Panel L. (See 8.2.2)

2) Remove the Side Panel R. (See 8.2.3)

3) Remove 3 screws(A) and 2 screws(B).

4) Disconnect CN536.

5) Remove the Front Panel.

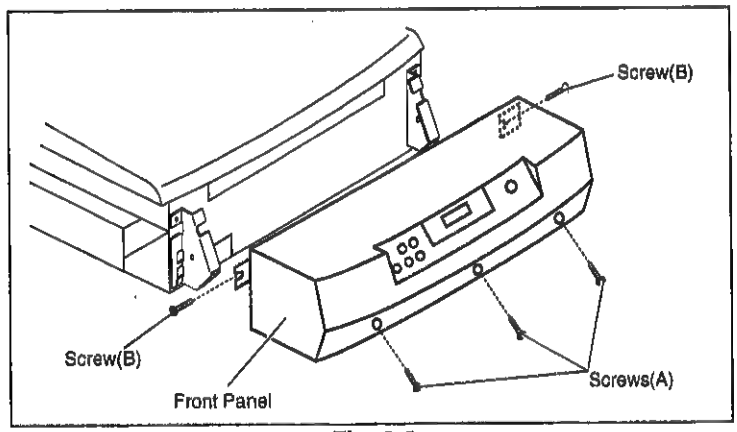


Fig. 8-6

8.2.5 Flathead White Plate

1) Peel off Flathead White Plate, as shown in Fig. 8-7.

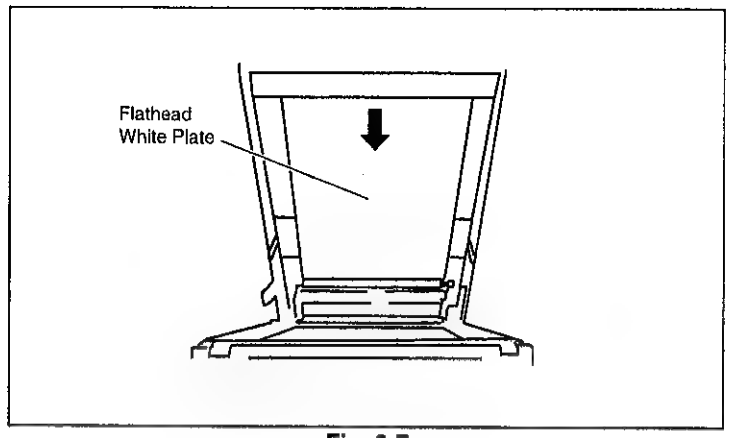


Fig. 8-7

8.2.6 ADF Side Panel L

1) Remove 2 screws(A).
2) Open Front Door.
3) Remove screw(B).
4) Remove the ADF Side Panel L.

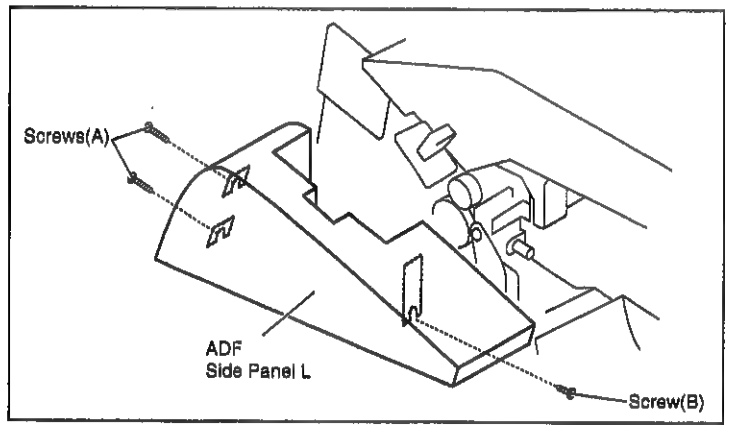


Fig. 8-8

8.2.7 ADF Side Panel R

1) Remove 2 screws(A).
2) Open Front Door.
3) Remove screw(B).
4) Remove the ADF Side Panel R.

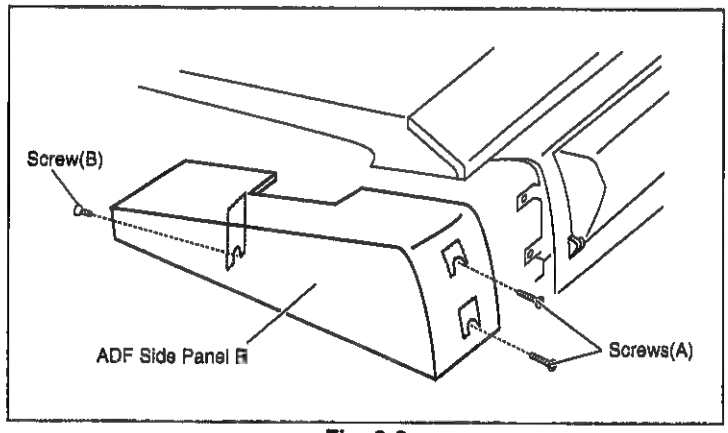


Fig. 8-9

8.2.8 Back Cover

1) Open ADF Door.

2) Loosen 4 screws and remove the Back Cover.

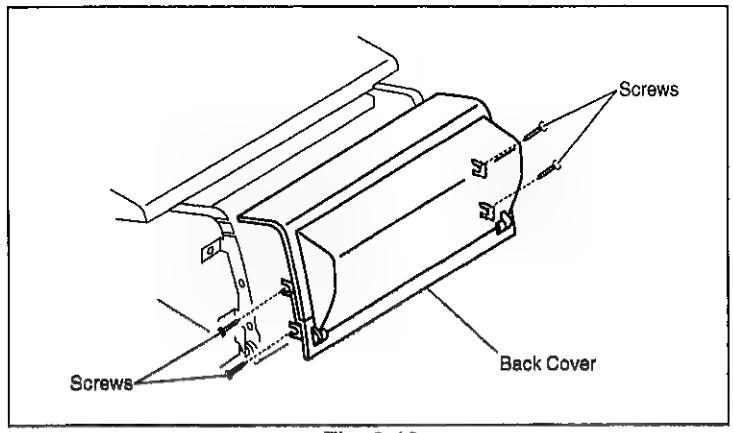


Fig. 8-10

8.2.9 Back Door

1) Push the Back Door, as shown in Fig. 8-11.

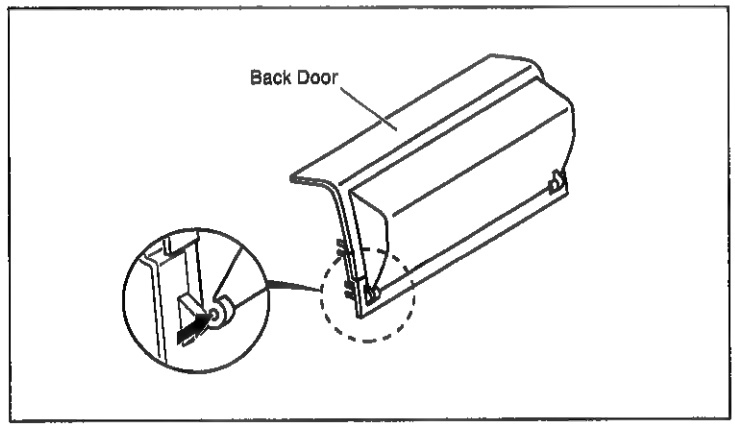


Fig. 8-11

8.2.10 Hopper Tray

1) Open Front Door.

2) Push the Hopper Tray, as shown in the Fig. 8-12.

3) Disconnect CN529.
   Note: When connecting CN529, printed character on cable should be upper side.

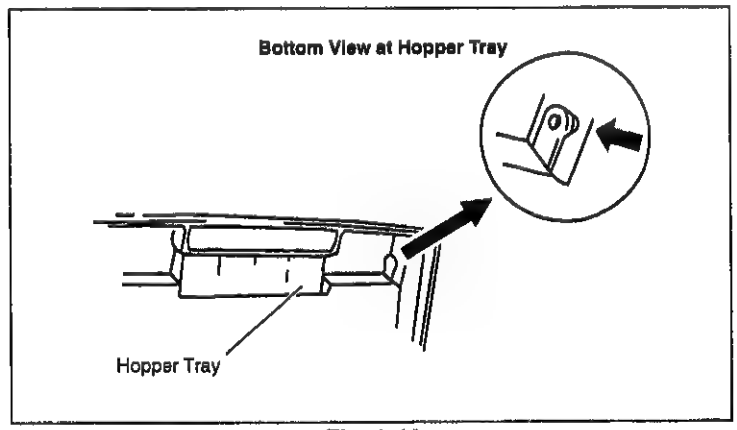


Fig. 8-12

8.2.11 FB Glass Base

1) Open Document Cover.

2) Remove Side Panel L.
(See 8.2.2)

3) Remove Side Panel R.
(See 8.2.3)

4) Remove Front Panel.
(See 8.2.4)

5) Loosen 2 screws (A).

6) Remove 6 screws and FB Glass Base.

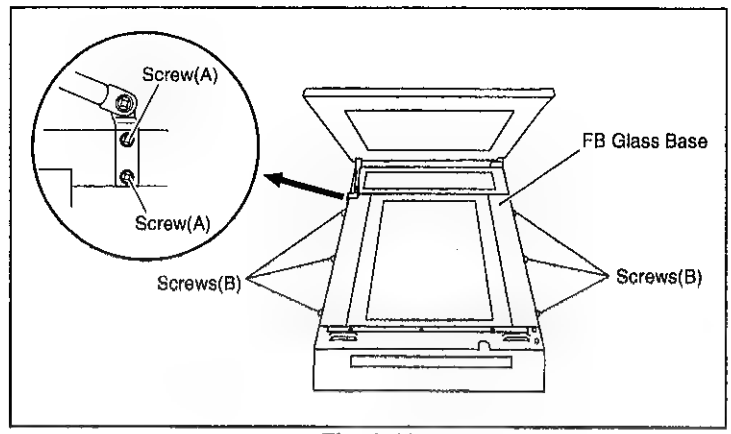


Fig. 8-13

8.2.12 ADF Glass Base

1) Open Document Cover.

2) Remove Side Panel L.
(See 8.2.2)

3) Remove Side Panel R.
(See 8.2.3)

4) Remove 4 screws(A).

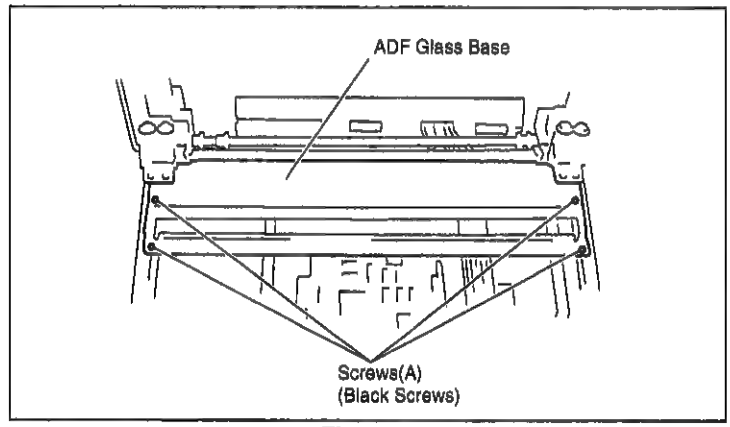


Fig. 8-14

5) Remove 2 screws(B) and ADF Glass Base.

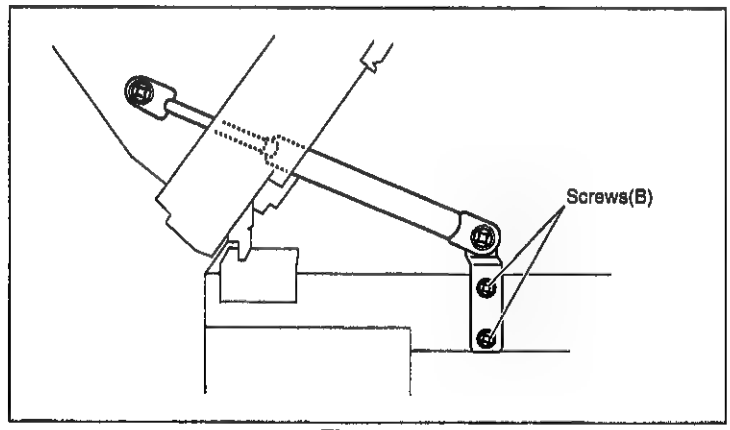


Fig. 8-15

8.2.13 Hopper Base

1) Remove Hopper Tray.
   (See 8.2.10)

2) Remove 2 screws(A).

3) Remove 2 screws(B) from the bottom of Hopper Base.

4) Remove 2 screws(C) from the top of Hopper Base.

5) Remove the Hopper Base.

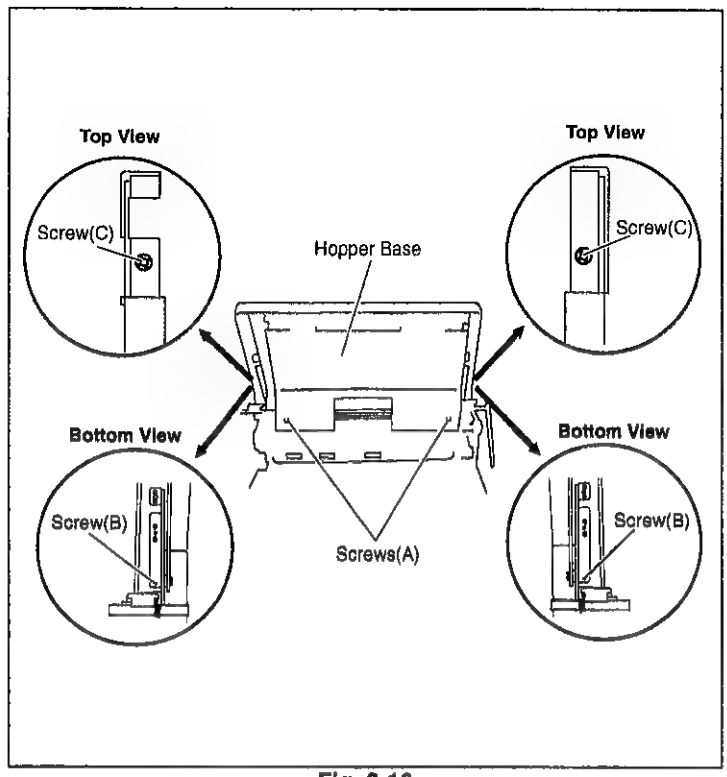


Fig. 8-16

8.2.14 White Plate

1) Remove ADF Side Panel R.
   (See 8.2.7)

2) Open Front Door.

3) Loosen 2 screws.

4) Remove White Plate.

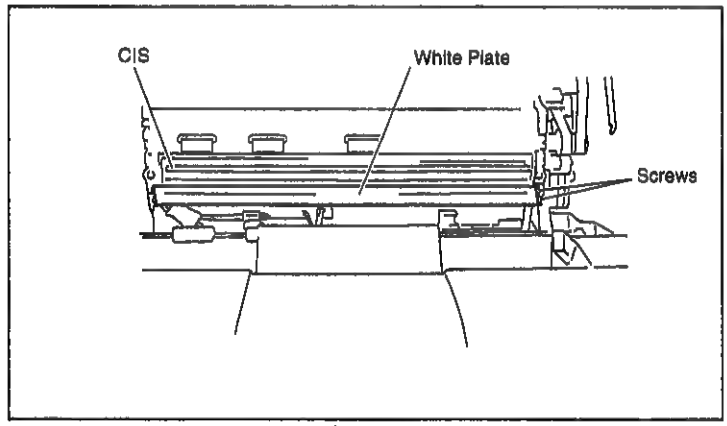


Fig. 8-17

8.2.15 Exit Conveyor

1) Open Front Door.

2) Remove 4 screws and Exit Conveyor.

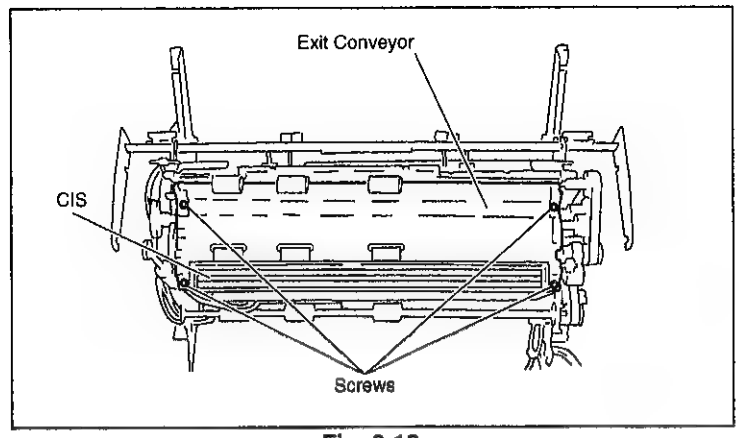


Fig. 8-18

8.2.16 Inner Conveyor

1) Remove Back Cover.
   (See 8.2.8)

2) Open ADF Door.

3) Remove 6 screws and Inner Conveyor.

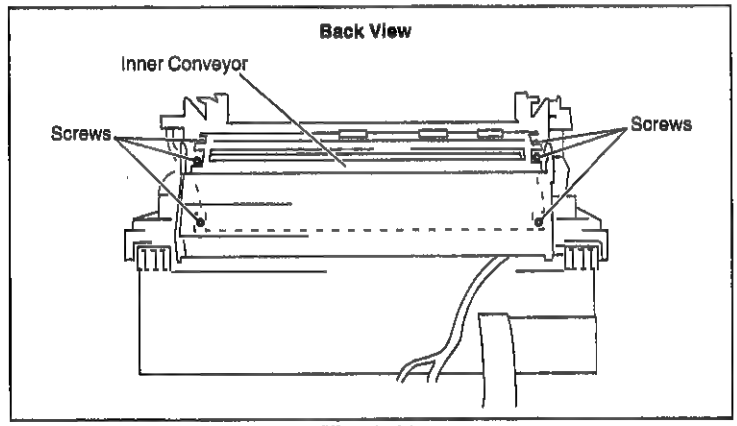


Fig. 8-19

8.2.17 Lower Conveyor 1

1) Remove ADF Side Panel L.
   (See 8.2.6)

2) Remove ADF Side Panel R.
   (See 8.2.7)

3) Remove Gas Damper.
   (See 8.3.17)

4) Open Front Door.

5) Remove 4 screws(A).

6) Remove 2 screws(B) and Lower Conveyor 1.

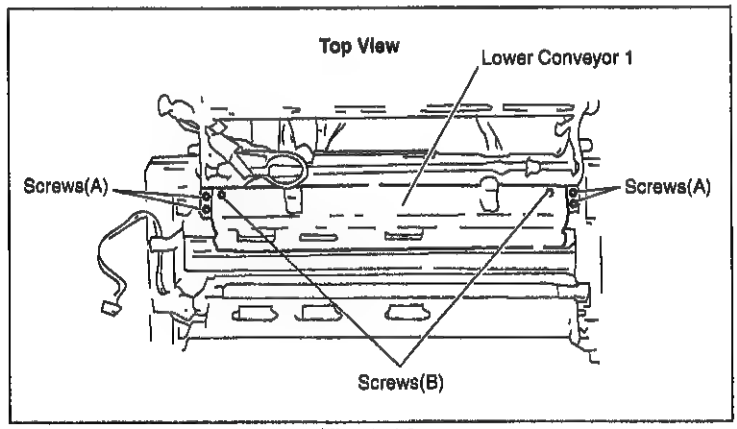


Fig. 8-20

8.2.18 Shield Plate

1) Remove Optical Carriage.
   (See 8.3.1)

2) Remove screw(B) and Shield Plate 2.

3) Remove 11 screws(A) and Shield Plate 1.

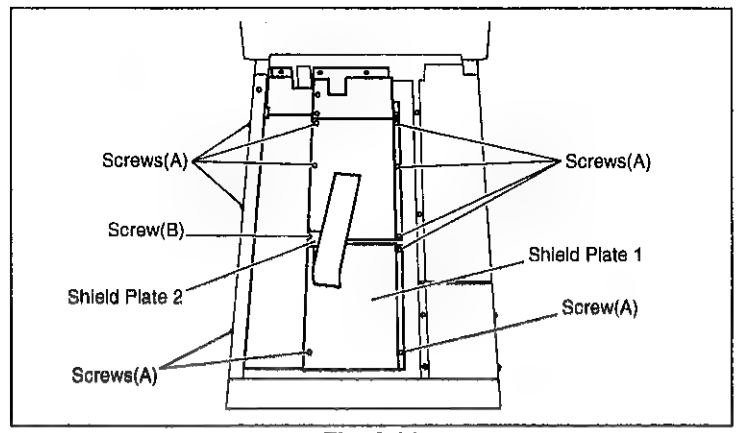


Fig. 8-21

4) Remove 6 screws(C) and Shield Plate 3.

5) Remove 6 screws(D), Shield Plate 4, and Shield Plate 5.

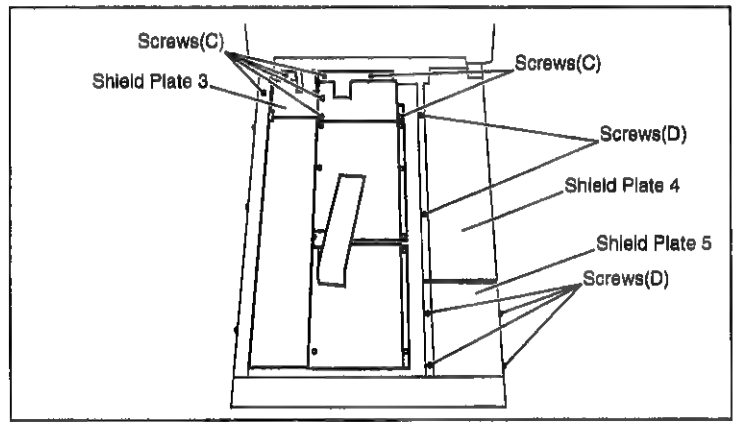


Fig. 8-22

8.3 Unit Components

8.3.1 Optical Carriage

1) Remove FB Glass Base.
   (See 8.2.11)

2) Remove ADF Glass Base.
   (See 8.2.12)

3) Remove 2 screws(A) and Loosen screw(B) and pull out Shaft, as shown in Fig. 8-23.

4) Disconnect Connector from Optical Carriage.
   Note: When assembling, supply the cable to this carriage so that "CCD" character is seen from front side.

5) Remove Optical Carriage.

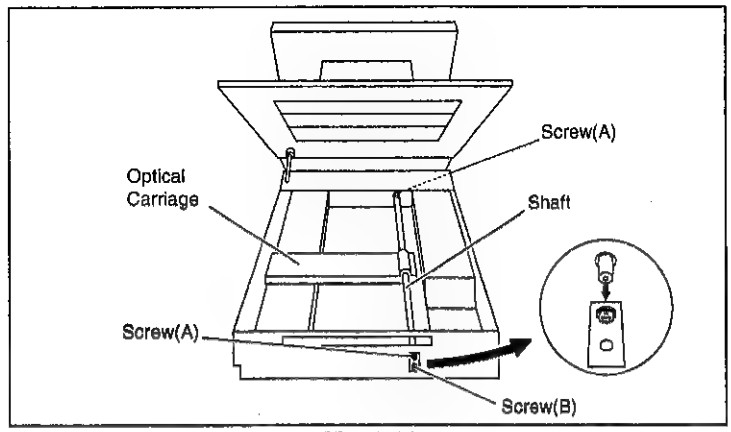


Fig. 8-23

8.3.2 Carriage Motor

1) Remove Shield Plate.
   (See 8.2.18)

2) Remove 2 screws(A).

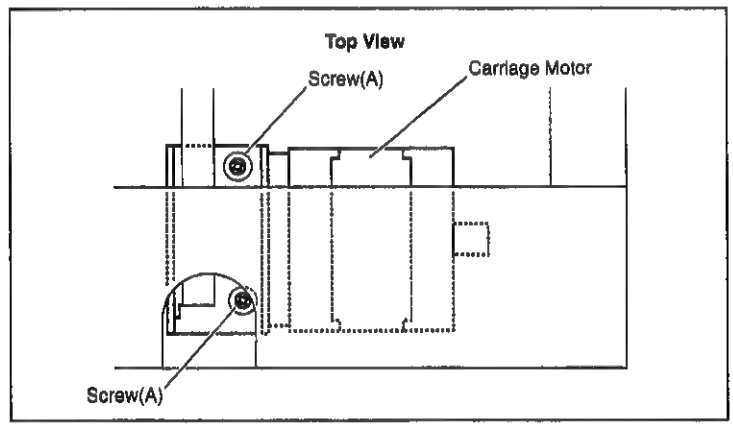


Fig. 8-24

3) Remove 4 nuts from the bottom side of this scanner.

4) Disconnect Carriage Motor Connector.

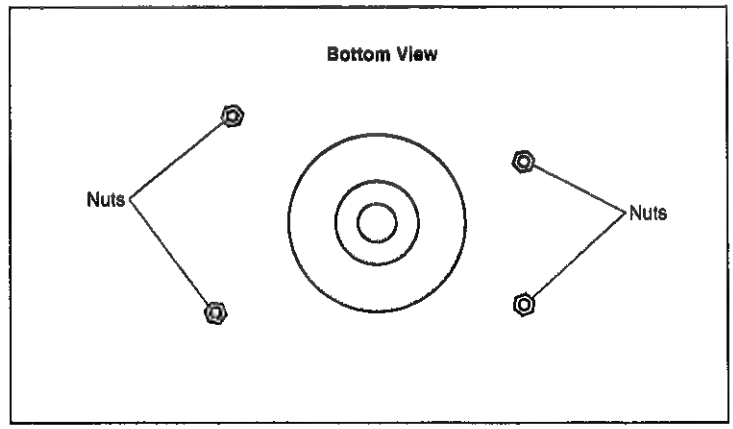


Fig. 8-25

8.3.3 Drive Belt 3

1) Remove Carrige Motor.
   (See 8.3.2)

2) Remove Drive Belt 3, as shown in Fig. 8-26.

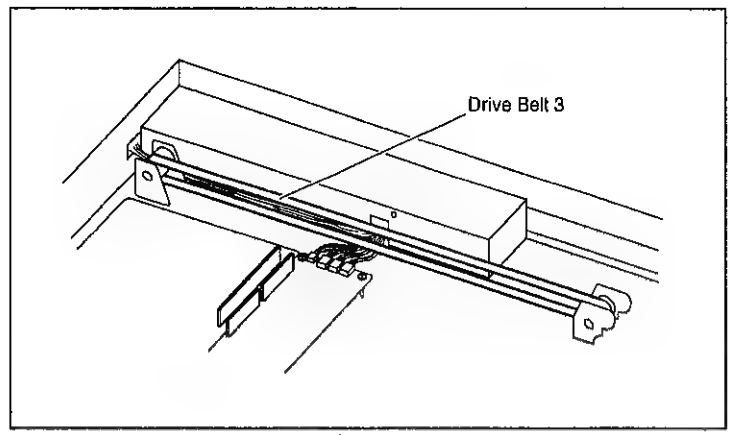


Fig. 8-26

8.3.4 Power Unit Box and Cover

1) Remove Optical Carriage.
   (See 8.3.1)

2) Remove 3 screws(A), as shown in Fig. 8-27.

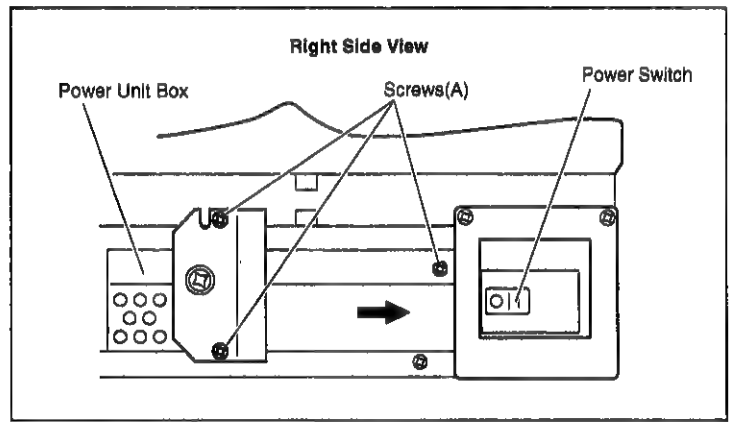


Fig. 8-27

3) Remove screw(B), as shown in Fig. 8-28.

4) Slide Power Unit Box to the back side, according to the arrow, as shown in Fig. 8-27.

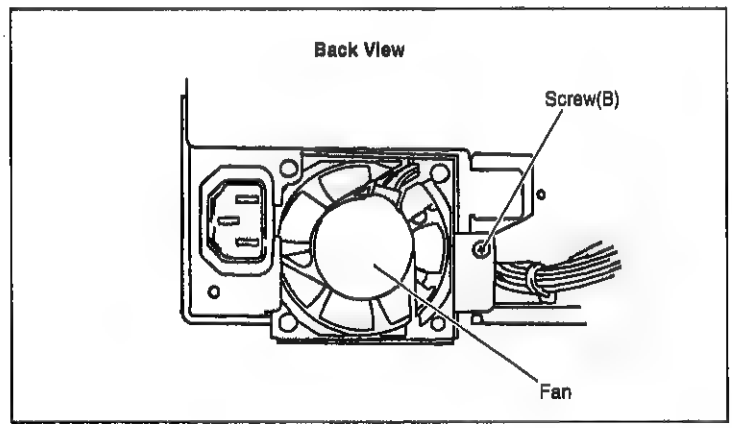


Fig. 8-28

5) Remove 6 screws and slide Power Unit Cover to back side, as shown in Fig. 8-29.

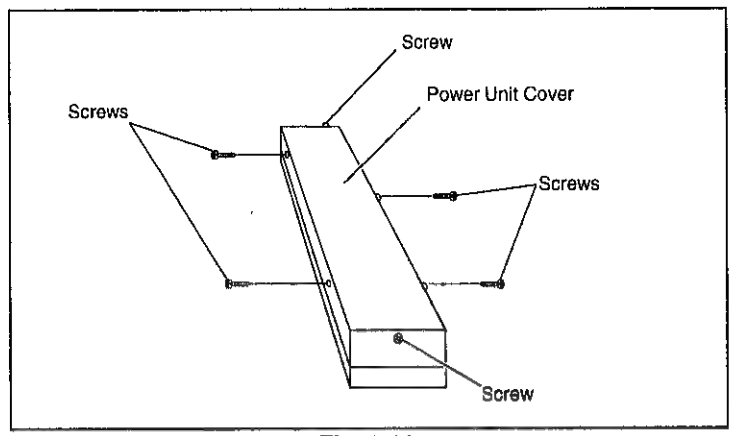


Fig. 8-29

8.3.5 Lamp Module

1) Remove Optical Carriage. (See 8.3.1)

2) Remove 2 screws(A) and brackets.

3) Remove 4 screws(B) and Cover.

4) Disconnect Lamp Module Connector.

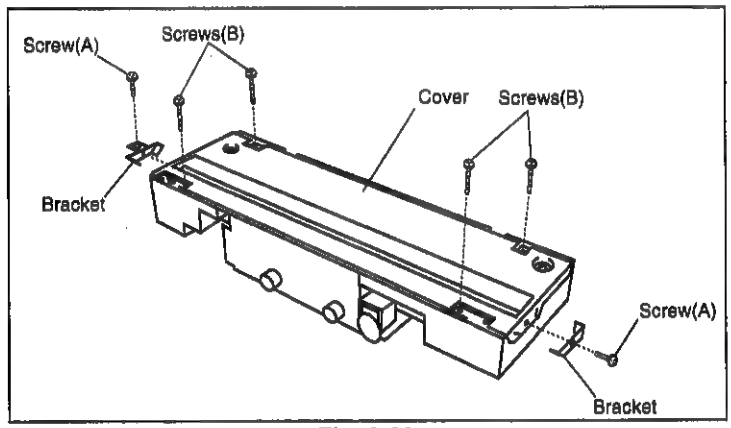


Fig. 8-30

5) Remove 2 screws(C), and Lamp Module.

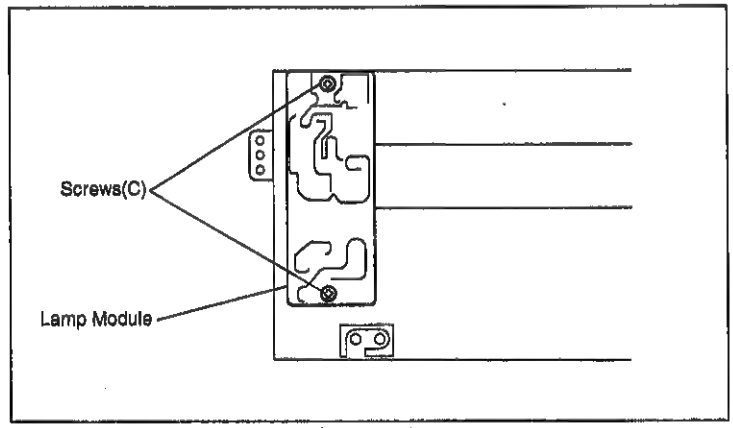


Fig. 8-31

8.3.6 Power Switch

1) Remove Power Unit Box and Cover. (See 8.3.4)

2) Remove Power Switch from the chassis. (Pull out while pressing both sides of the locking section)

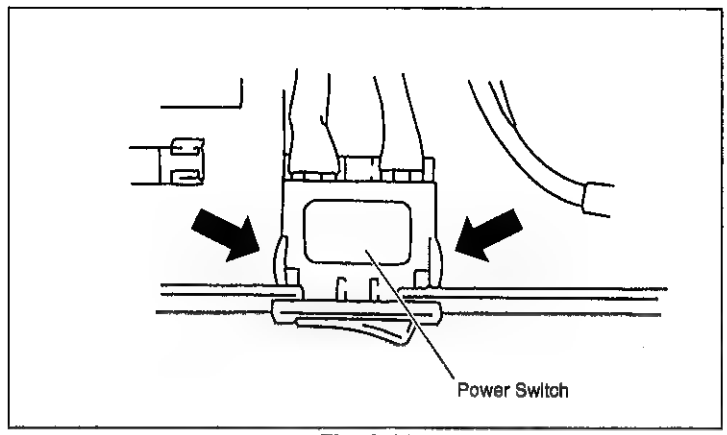


Fig. 8-32

WARNING
When replacing the Power Switch or Inlet, the wiring must be installed as illustrated.

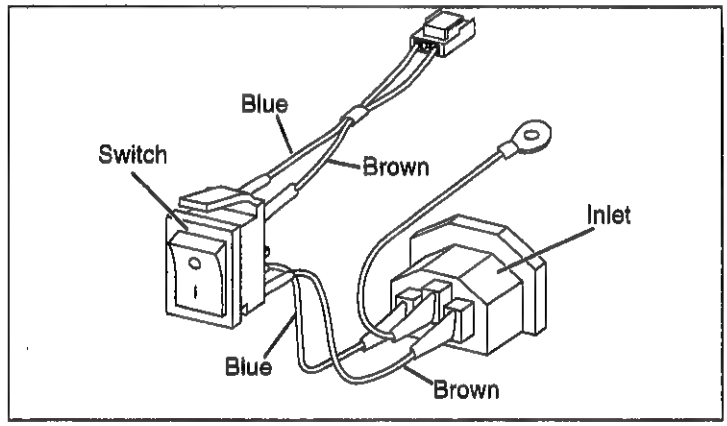


Fig. 8-33

8.3.7 Fan

1) Remove Back Panel. (See 8.2.1)

2) Remove Power Unit Box and Cover. (See 8.3.4)

3) Disconnect Fan connector.

4) Remove 2 screws(A), screw(B), and Fan, as shown in Fig. 8-34.

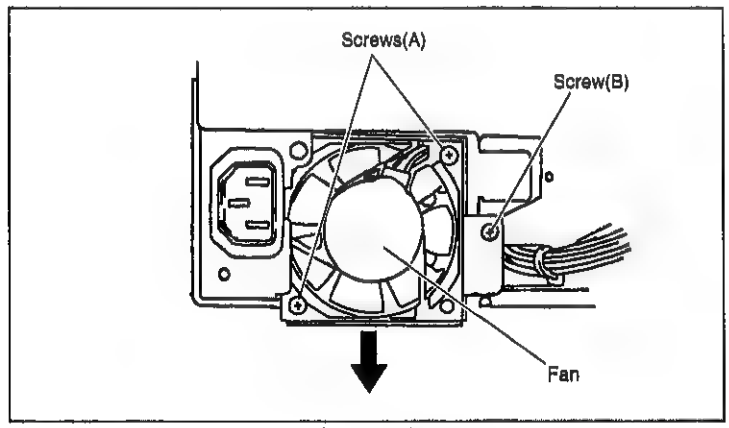


Fig. 8-34

8.3.8 Paper Feed Roller

1) Open ADF Door.

2) Open Plate.

3) Unlock the Paper Feed Roller from the notching hole of chassis and remove it.

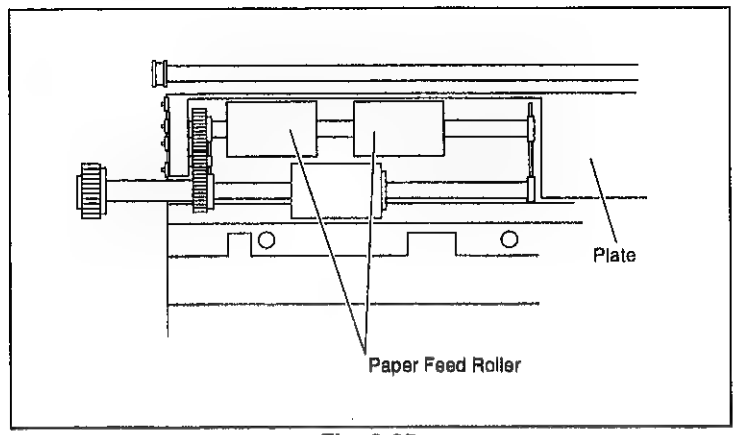


Fig. 8-35

8.3.9 Separation Roller

1) Open ADF Door.

2) Open Plate.

3) Unlock the Separation Roller from the notching hole of chassis and remove it.

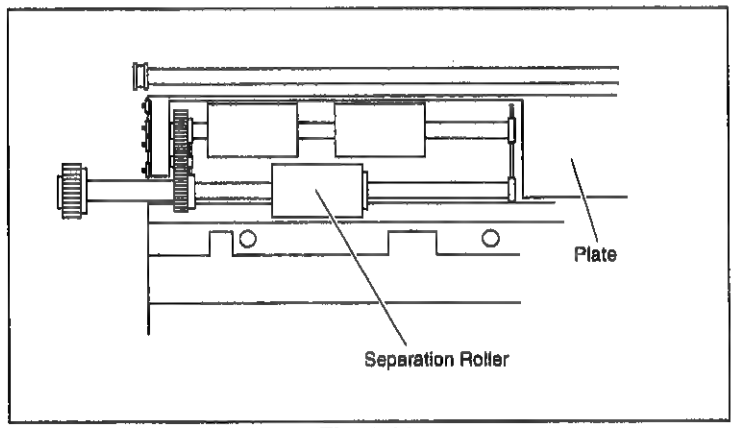


Fig. 8-36

8.3.10 Retard Roller

1) Open ADF Door.

2) Open Plate.

3) Grip the Retard Roller and slide, as shown in Fig. 8-37.

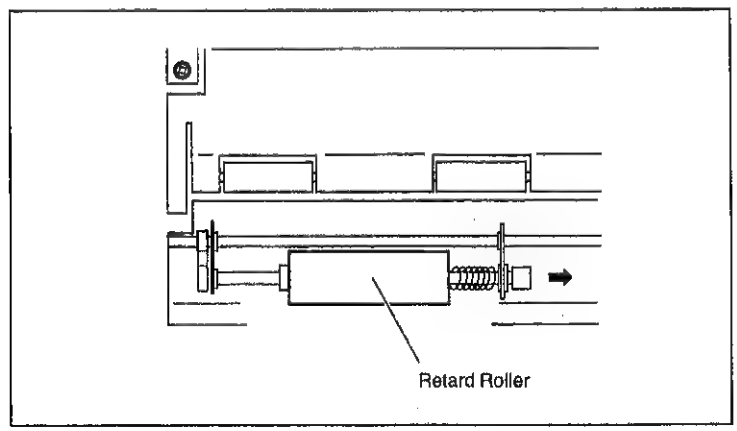


Fig. 8-37

8.3.11 CIS Platen Roller

1) Open Front Door.

2) Unlock the CIS Platen Roller from the notching hole of chassis and remove it.

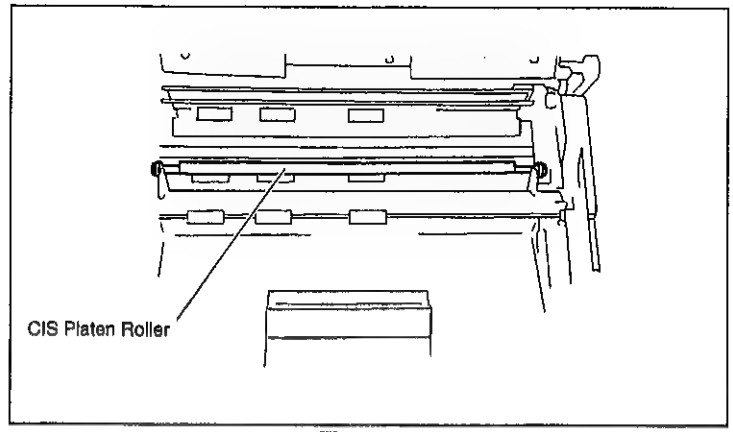


Fig. 8-38

8.3.12 Drive Belt 2

1) Remove ADF Side Panal R.
(See 8.2.7)

2) Loosen 2 screws and remove Drive Belt 2.

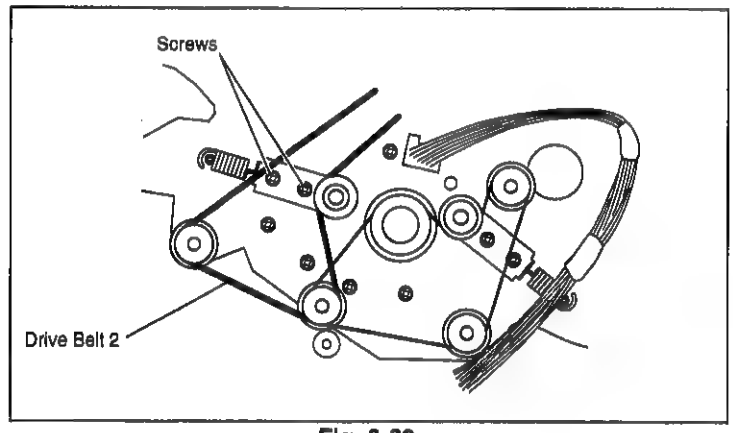


Fig. 8-39

8.3.13 Drive Belt 1

1) Remove ADF Side Panel R.
(See 8.2.7)

2) Remove Drive Belt 2.
(See 8.3.12)

3) Loosen 2 screws and remove Drive Belt 1.

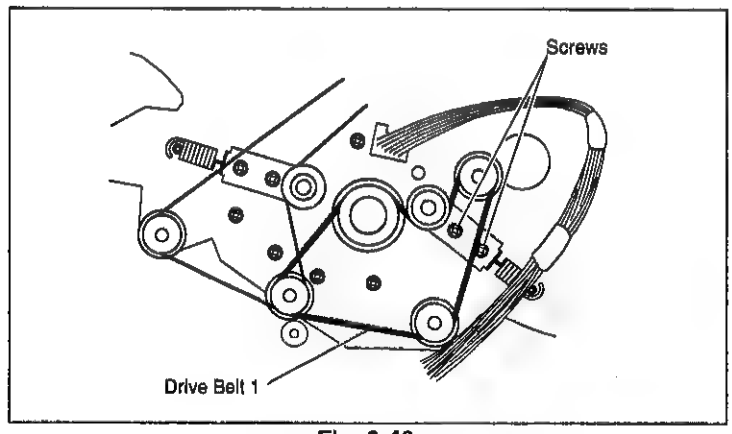


Fig. 8-40

8.3.14 Conveyor Roller 1-5

1) Remove Inner Conveyor.
   (See 8.2.16)

2) Remove ADF Side Panel R.
   (See 8.2.7)

3) Unlock Conveyor Roller (1,2) from the notching hole of the chassis and remove them.

4) Remove Exit Conveyor.
   (See 8.2.15)

5) Unlock Conveyor Roller 3,4, and 5 from the notching hole of the chassis and remove them.

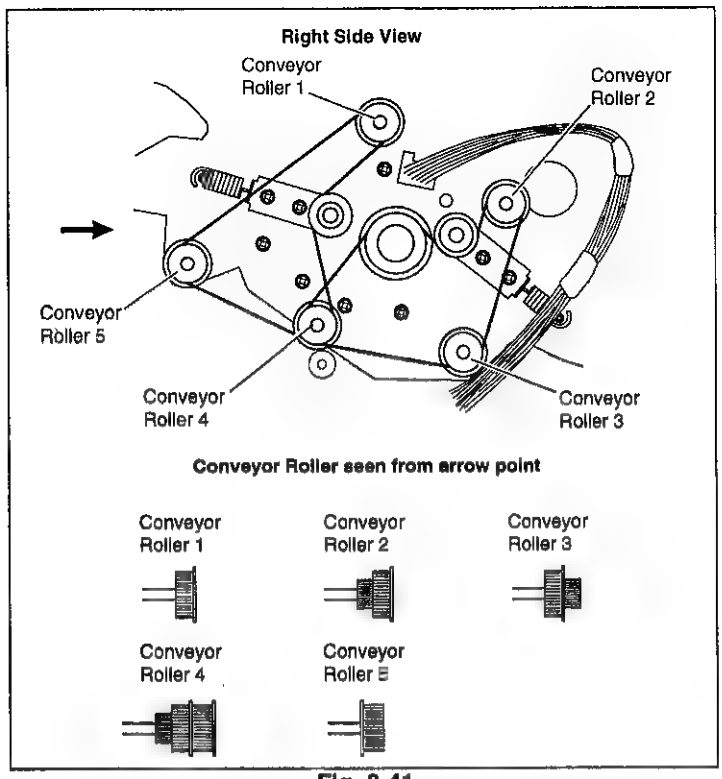


Fig. 8-41

8.3.15 ADF Door Switch

1)Remove Inner Conveyor.
   (See 8.2.16)

2) Remove ADF Side Panel R.
   (See 8.2.7)

3) Disconnect ADF Door Switch connector.

4) Remove screw and ADF Door Switch.

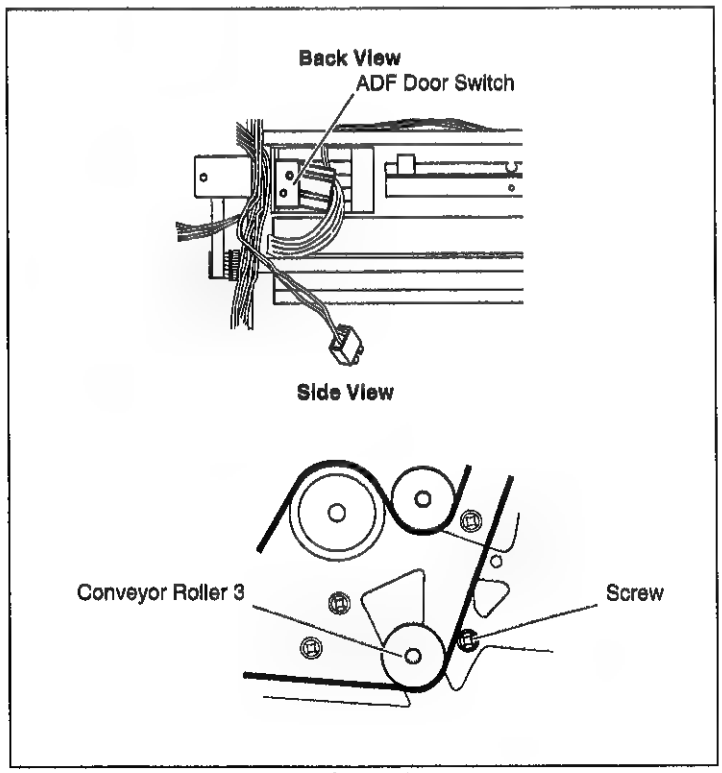


Fig. 8-42

8.3.16 Paper Feed Motor

1) Remove Inner Conveyor.
   (See 8.2.16)

2) Remove Conveyor Roller 1, 2.
   (See 8.3.14-3)

3) Remove Exit Conveyor.
   (See 8.2.15)

4) Remove RELAY(SIDE) Board.
   (See 8.4.19)

5) Remove 2 E-rings and Gears.

6) Remove 2 screws(A) as shown in Fig. 8-43.

7) Remove SIZE LED Board.
   (See 8.4.11)

8) Disconnect Paper Feed Motor connector and Paper Feed Motor.

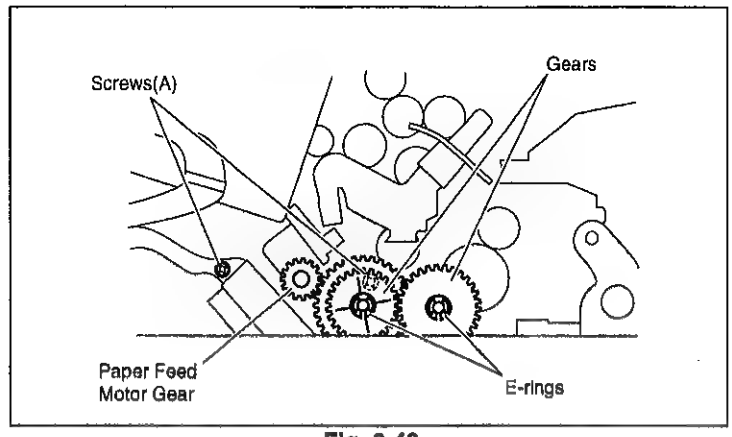


Fig. 8-43

8.3.17 Gas Damper

1) Remove ADF Side Panel L.
   (See 8.2.6)

2) Open Document Cover.

3) Remove 2 screws and Gas Damper.

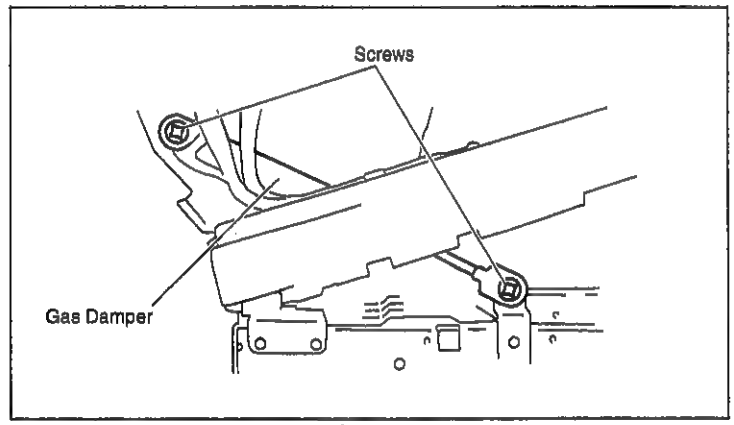


Fig. 8-44

8.3.18 Front Door Switch

1) Open Front Door.

2) Remove Exit Conveyor.
(See 8.2.15)

3) Disconnect Front Door Switch connector.

4) Remove screw and Front Door Switch.

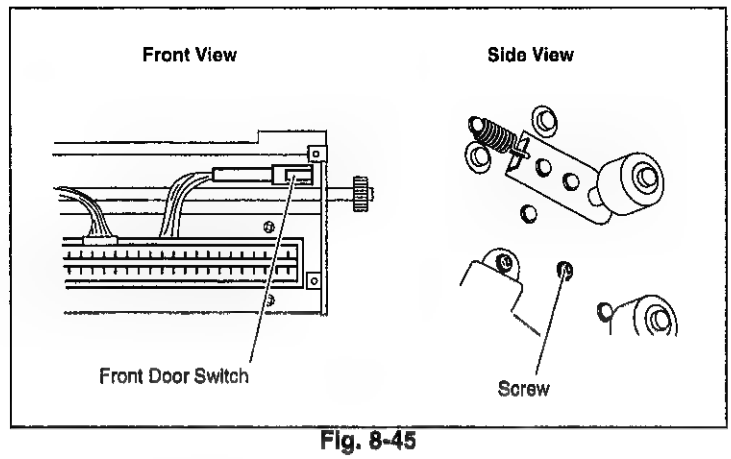


Fig. 8-45

8.3.19 CIS

1) Remove White Plate.
(See 8.2.14)

2) Remove Exit Conveyor.
(See 8.2.15)

3) Remove 4 screws and CIS.

4) Disconnect CIS connector.

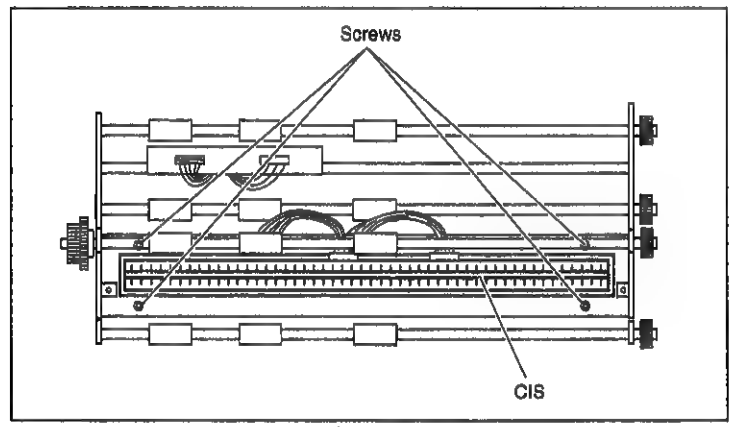


Fig. 8-46

8.3.20 Conveyor Motor

1) Remove Inner Conveyor.
(See 8.2.16)

2) Remove Exit Conveyor.
(See 8.2.15)

3) Remove ADF Side Panel R.
(See 8.2.7)

4) Remove 2 screws.

5) Disconnect Conveyor Motor connector, and remove Conveyor Motor.

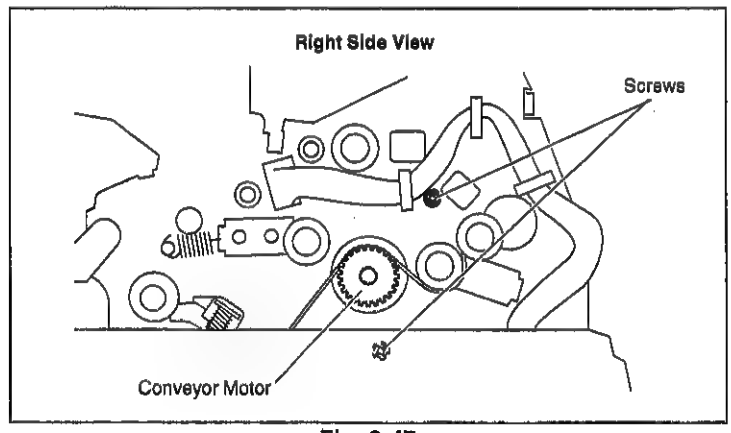


Fig. 8-47

8.3.21 Outer Door

1) Open the ADF Door.

2) Remove the Plate.

3) Remove 6 screws and Outer Door.

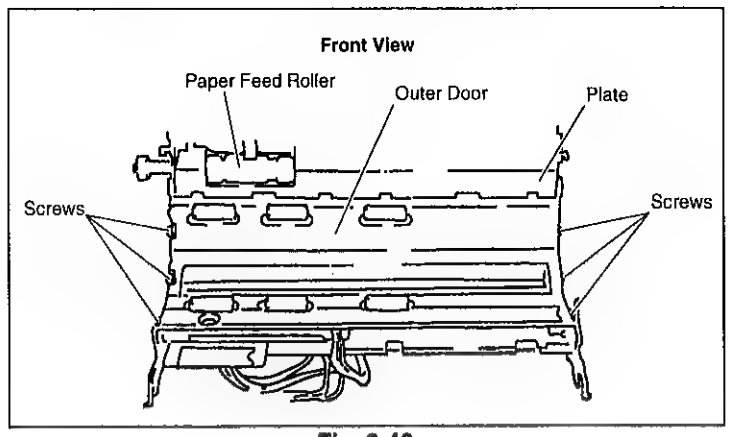


Fig. 8-48

8.4 Circuit Board Assemblies

8.4.1 MAIN CONTROL Board

1) Remove Back Panel.
   (See 8.2.1)

2) Remove 2 screws and MAIN CONTROL Board.

3) Disconnect all connectors from/to MAIN CONTROL Board.
   Note: See SECTION 11 BLOCK DIAGRAM for connections.

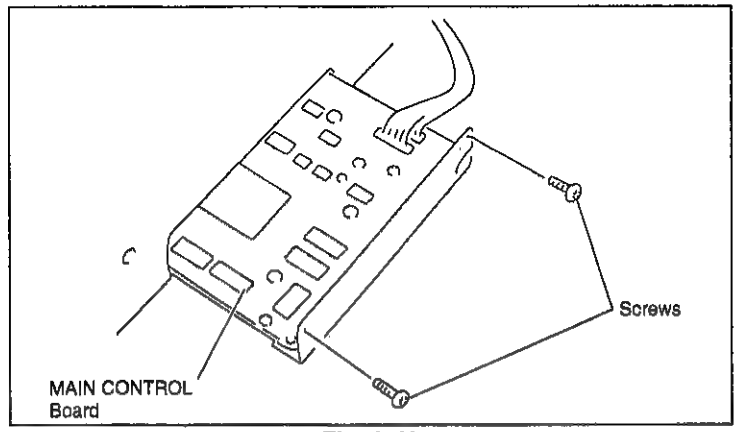


Fig. 8-49

8.4.2 SCSI Board

1) Remove 3 thumb screws.

2) Pull out SCSI Board.

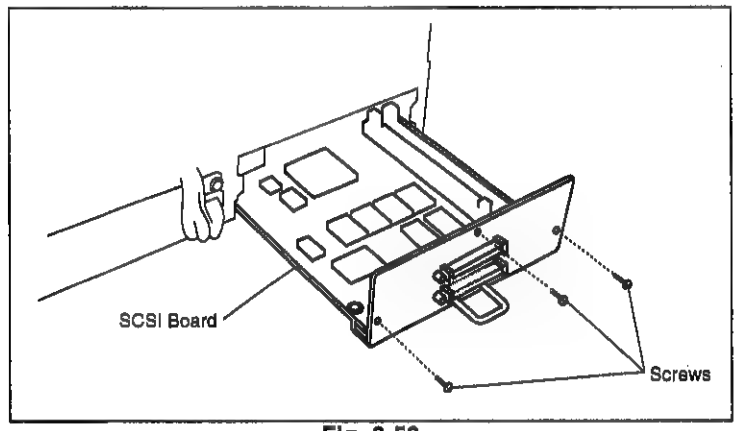


Fig. 8-50

8.4.3 DRIVE Board

1) Remove FB Glass Base.
   (See 8.2.11)

2) Remove Optical Carriage.
   (See 8.3.1)

3) Remove Shield Plate.
   (See 8.2.18)

4) Remove 4 screws and DRIVE Board.

5) Disconnect all connectors from/to DRIVE Board.
   Note: See SECTION 11 BLOCK DIAGRAM for connections.

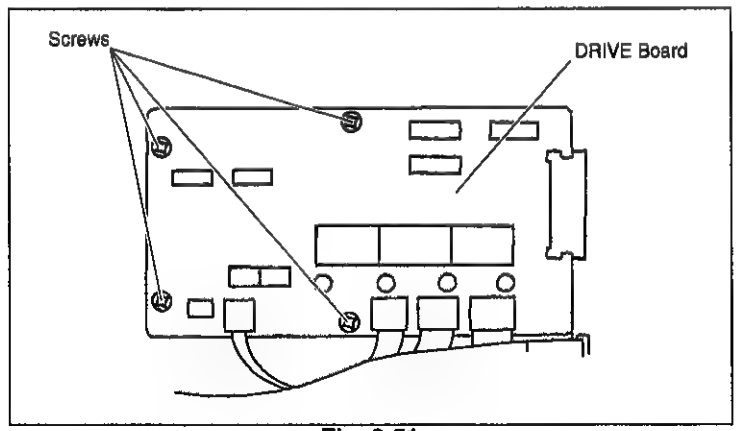


Fig. 8-51

8.4.4 POWER Board

1) Remove FB Glass Base.
   (See 8.2.11)

2) Remove Power Unit Box and Cover.
   (See 8.3.4)

3) Remove 11 screws and POWER Board.

4) Disconnect all connectors from/to POWER Board.
   Note: See SECTION 11 BLOCK DIAGRAM for connections.

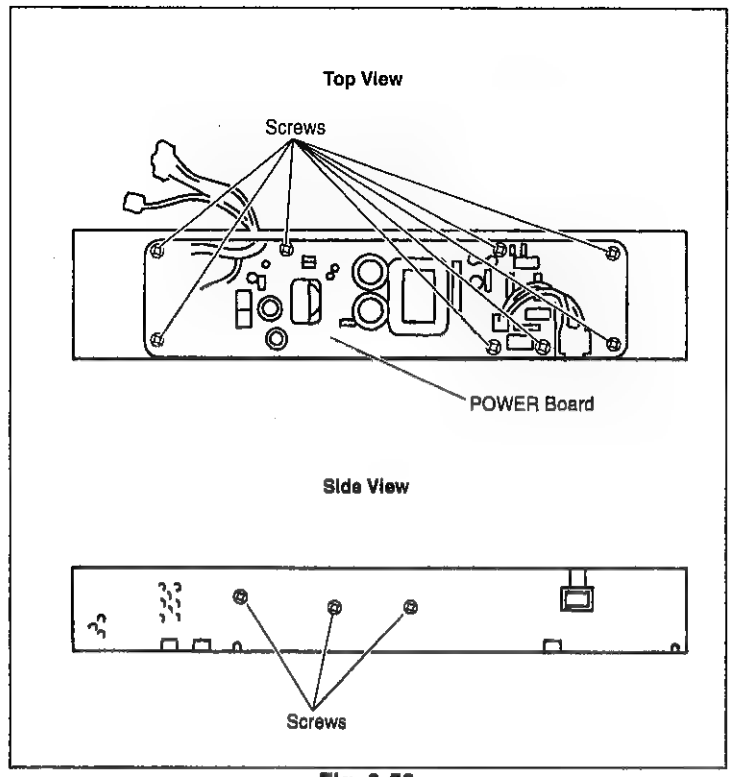


Fig. 8-52

8.4.5 MOTHER Board

1) Remove FB Glass Base.
   (See 8.2.11)

2) Remove Optical Carriage.
   (See 8.3.1)

3) Remove Shield Plate.
   (See 8.2.18)

4) Remove DRIVE Board.
   (See 8.4.3)

5) Remove 5 screws and MOTHER Board.

6) Disconnect all connectors from/to MOTHER Board.
   Note: See SECTION 11 BLOCK DIAGRAM for connections.

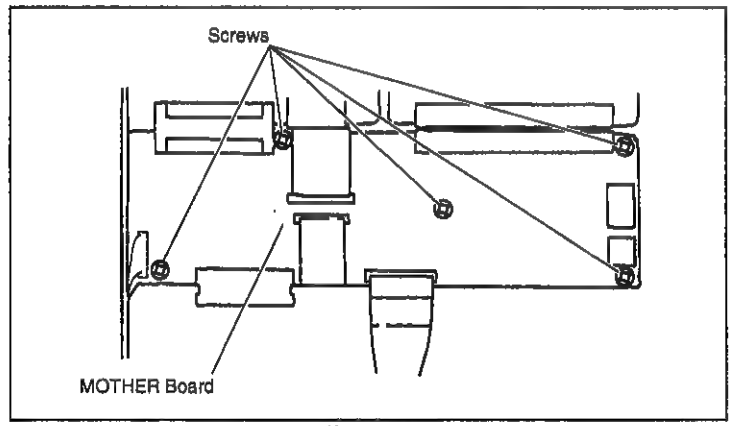


Fig. 8-53

8.4.6 PANEL Board

1) Remove Front Panel.
   (See 8.2.4)

2) Remove 7 screws and PANEL Board.

3) Disconnect CN536.

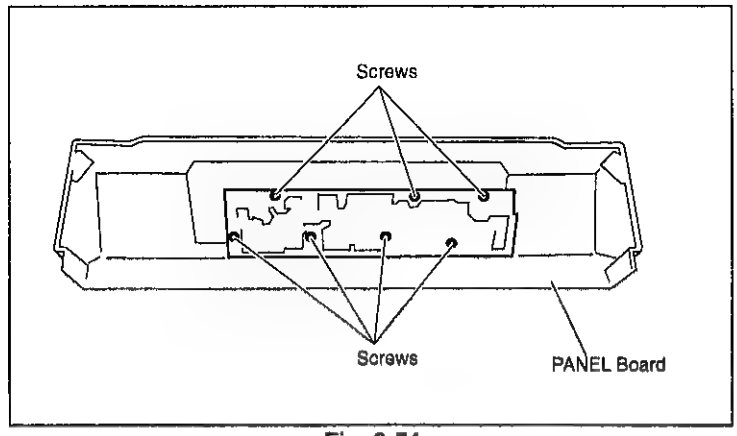


Fig. 8-54

8.4.7 HOPPER HOME SENSOR Board

1) Remove Exit Conveyor.
   (See 8.2.15)

2) Remove screw and HOPPER HOME SENSOR Board.

3) Disconnect CN529 and CN530.

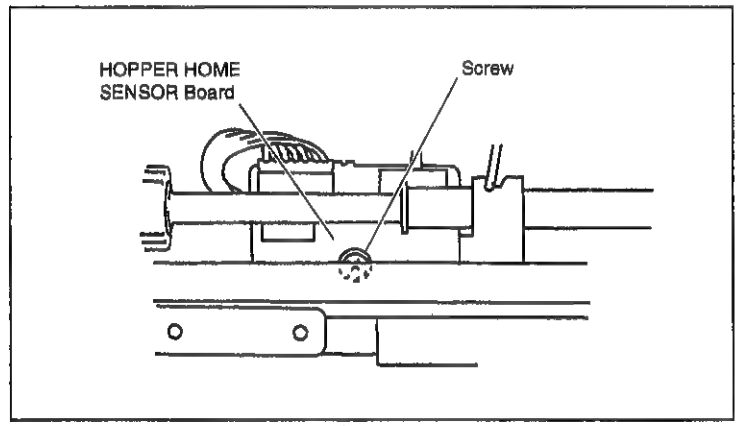


Fig. 8-55

8.4.8 RETARD POSITION DETECTOR Board

1) Remove ADF Side Panel L.
   (See 8.2.6)

2) Remove screw and RETARD POSITION DETECTOR Board.

3) Disconnect CN517.

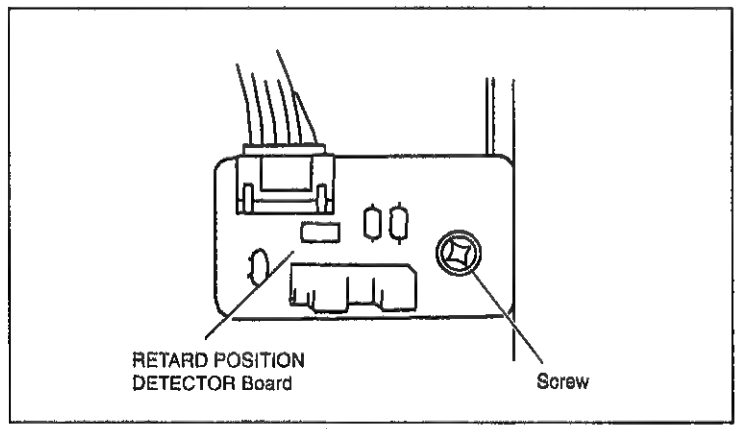


Fig. 8-56

8.4.9 DOCUMENT DETECTOR Board

1) Remove Hopper Tray.
   (See 8.2.10)

2) Remove 2 screws and DOCUMENT DETECTOR Board.

3) Disconnect CN537 and CN538.

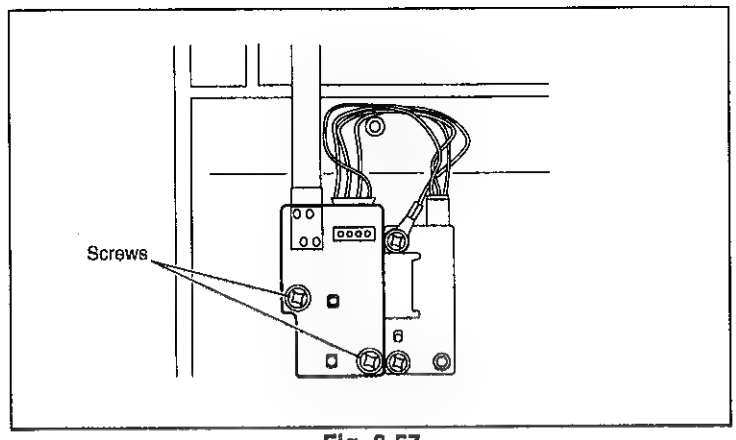


Fig. 8-57

8.4.10 SIZE SENSOR Board

1) Remove Outer Door.
   (See 8.3.21)

2) Remove 3 screws and SIZE SENSOR Board.

3) Disconnect CN521 having this Board.

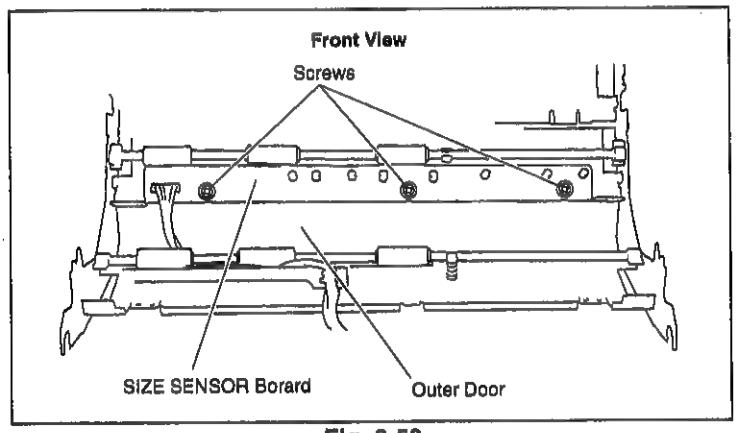


Fig. 8-58

8.4.11 SIZE LED Board

1) Remove Back Cover.
   (See 8.2.8)

2) Remove Inner Conveyor.
   (See 8.2.16)

3) Remove 3 screws and SIZE LED Board.

4) Disconnect CN524.

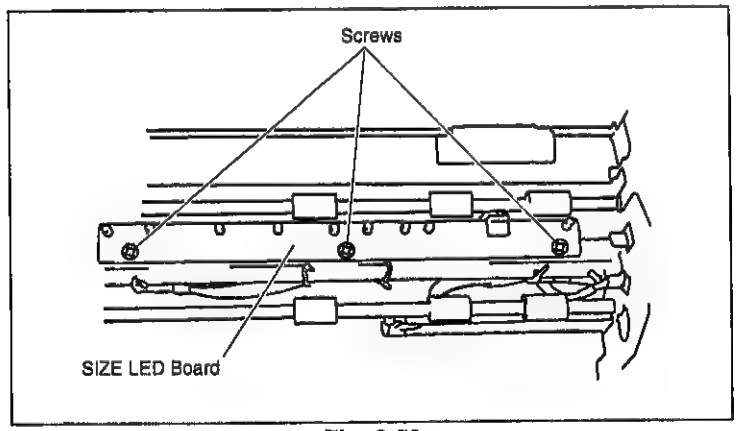


Fig. 8-59

8.4.12 DOUBLE FEED DETECTOR (G) Board

1) Remove Outer Door.
   (See 8.3.21)

2) Remove 3 screws(A) from Fitting Plate with DOUBLE FEED DETECTOR (G) Board.

3) Disconnect CN534.

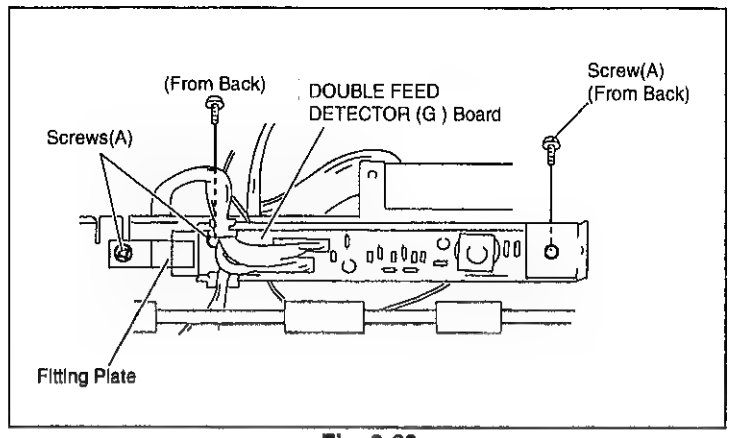


Fig. 8-60

4) Remove 2 screws(B) and DOUBLE FEED DETECTOR (G) Board.

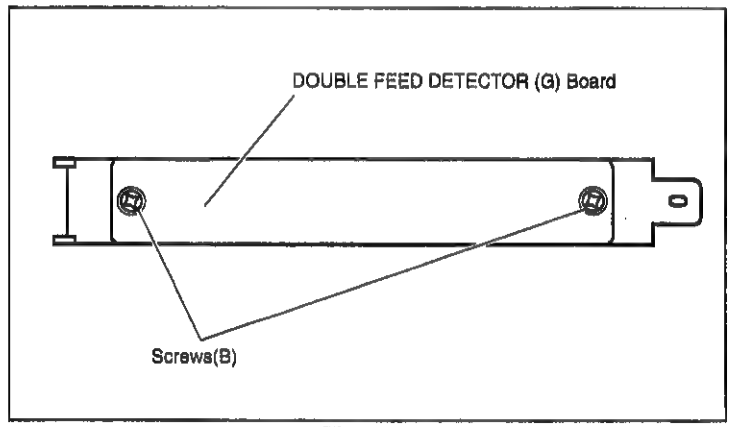


Fig. 8-61

8.4.13 DOUBLE FEED DETECTOR (R) Board

1) Remove Inner Conveyor.
(See 8.2.16)

2) Remove 2 screws(A) from Fitting Plate with DOUBLE FEED DETECTOR (R) Board.

3) Disconnect CN535.

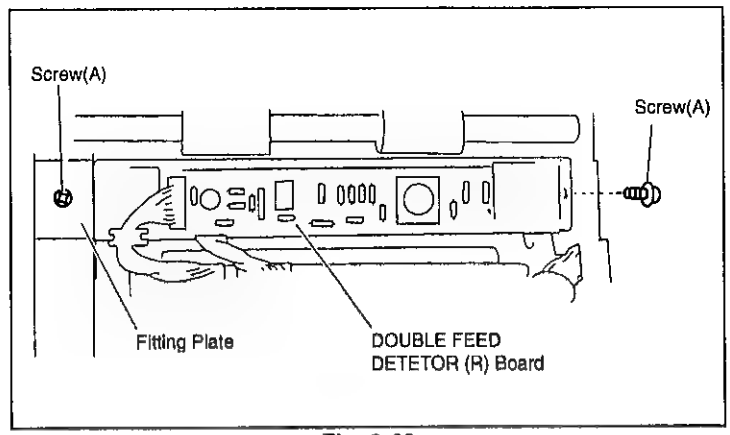


Fig. 8-62

4) Remove 2 screws(B) and DOUBLE FEED DETECTOR (R) Board.

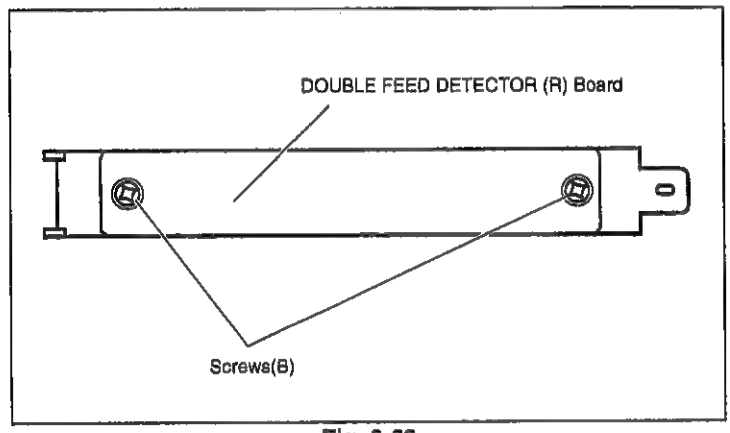


Fig. 8-63

8.4.14 STARTING POSITION LED Board

1) Remove Lower Conveyor 1.
(See 8.2.17)

2) Remove 2 screws and STARTING POSITION LED Board.

3) Disconnect CN518.

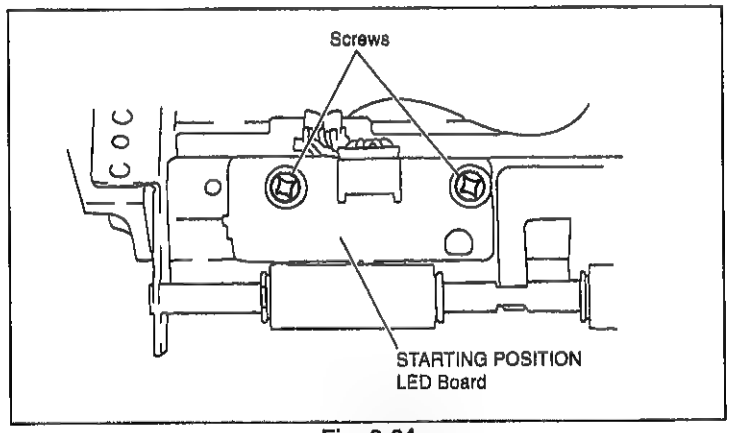


Fig. 8-64

8.4.15 STARTING POSITION SENSOR Board

1) Remove Paper Feed Motor. (See 8.3.16)

2) Remove 2 screws(A) from Fitting Plate with STARTING POSITION SENSOR Board.

3) Disconnect CN519 and CN520.

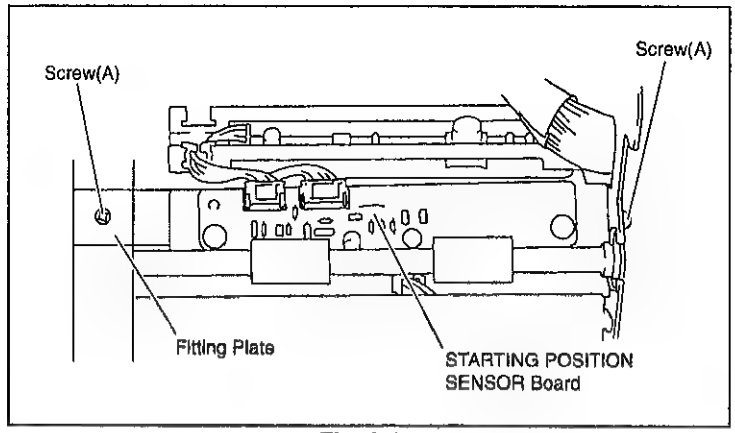


Fig. 8-65

4) Remove 2 screws(B) and STARTING POSITION SENSOR Board.

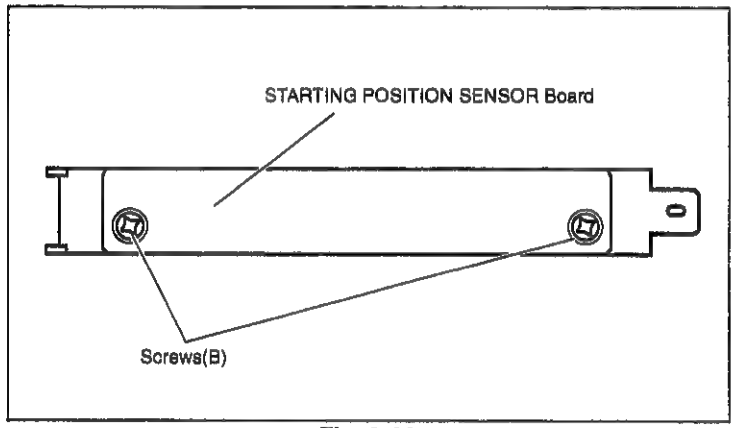


Fig. 8-66

8.4.16 ENDING POSITION LED Board

1) Open Document Cover.

2) Remove Flathead White Plate. (See 8.2.5)

3) Remove 2 screws and ENDING POSITION LED Board.

4) Disconnect CN525 and CN526.

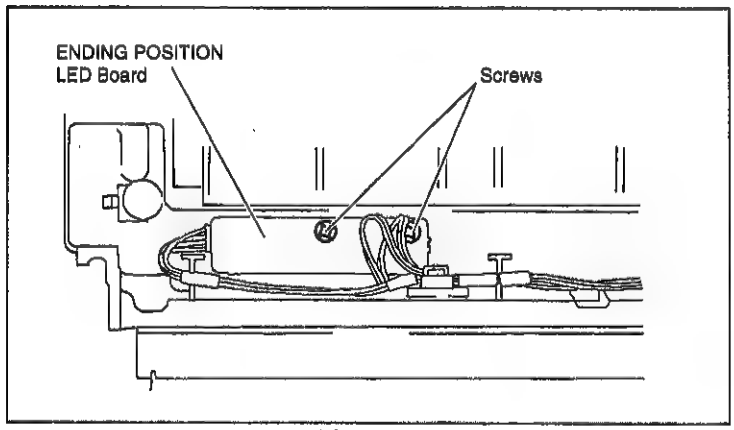


Fig. 8-67

8.4.17 ENDING POSITION SENSOR Board

1) Remove Exit Conveyor.
   (See 8.2.15)

2) Remove 2 screws and ENDING POSITION SENSOR Board.

3) Disconnect CN531 and CN532.

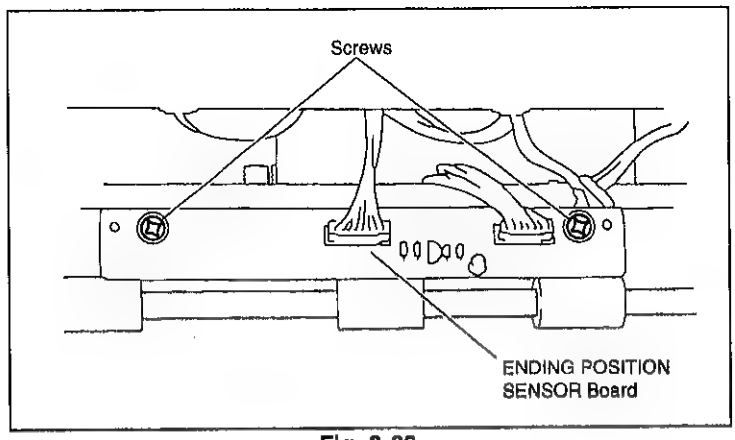


Fig. 8-68

8.4.18 RELAY (BACK) Board

1) Remove Back Door.
   (See 8.2.9)

2) Remove 5 screws and RELAY (BACK) Board.

3) Disconnect CN501, CN502, CN503, CN504, CN505, CN513, CN515, and CN522.
   Note: See SECTION 11 BLOCK DIAGRAM for connections.

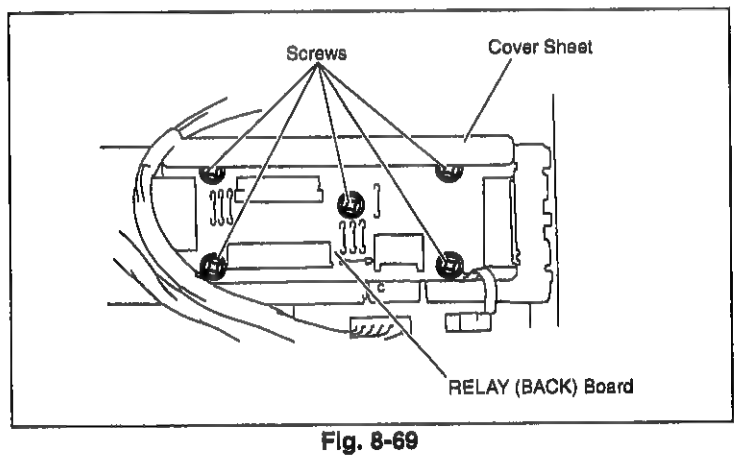


Fig. 8-69

8.4.19 RELAY (SIDE) Board

1) Remove ADF Side Panel L.
   (See 8.2.6)

2) Remove 4 screws and RELAY (SIDE) Board.

3) Disconnect all connectors from/to RELAY (SIDE) Board.
   Note: See SECTION 11 BLOCK DIAGRAM for connections.

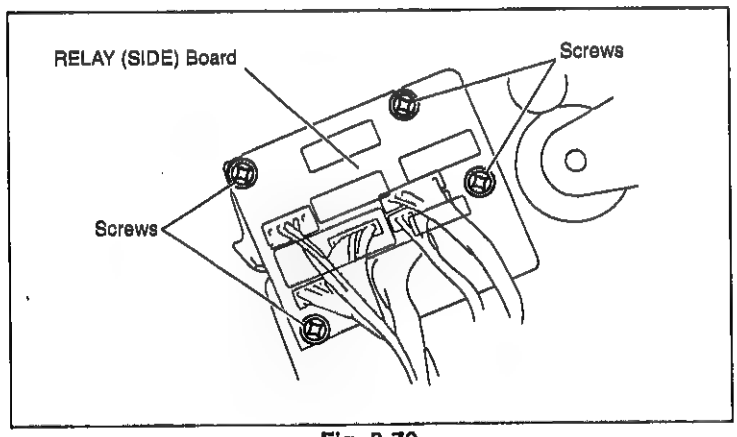


Fig. 8-70

8.4.20 CARRIAGE HOME DETECTOR Board

1) Remove FB Glass Base.
   (See 8.2.11)

2) Remove ADF Glass Base.
   (See 8.2.12)

3) Remove Shield Plate.
   (See 8.2.18)

4) Remove 2 screws and CARRIAGE HOME DETECTOR Board.

5) Disconnect CN516.

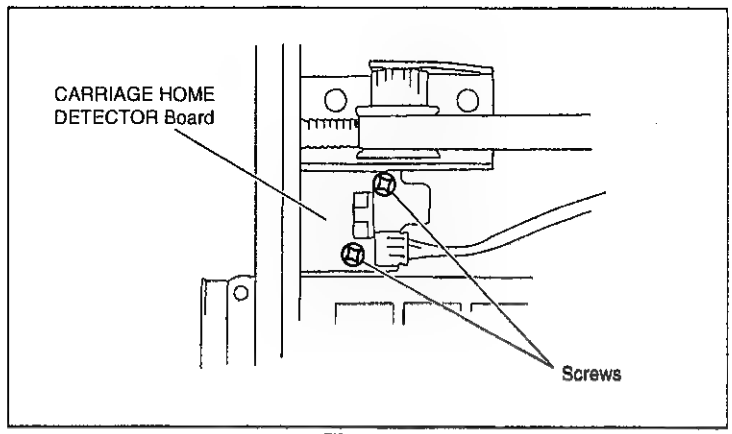


Fig. 8-71

8.4.21 DOCUMENT COVER SENSOR Board

1) Remove Flathead White Plate.
   (See 8.2.5)

2) Remove 2 screws and DOCUMENT COVER SENSOR Board.

3) Disconnect CN527.

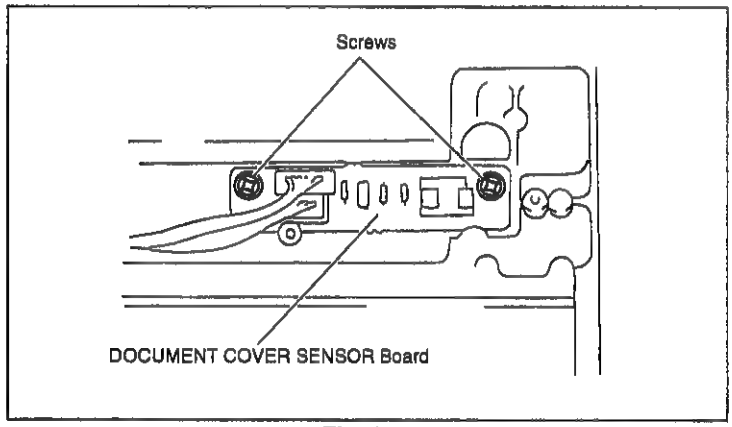


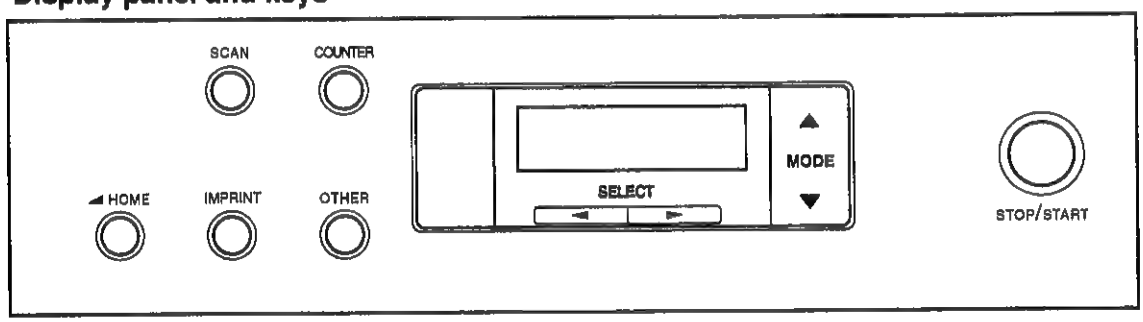
Fig. 8-72

SECTION 9
OPERATION

9.1 Specification

Item	Content
Indication Device	LCD Display
Indication Matrix	16 Characters x 2 lines
Kind of Character displayed	Alphabet, Number, Square Phonetic, Japanese Syllabary
Indicated Contents	System Status (Initializing, Ready, Scanning, Error, Warning) Setting (Scanning, Counter, Imprinter) Test Mode
Indicated Languages	English, German, Japanese
Operation Key	SCAN, COUNTER, IMPRINT, OTHERS, ▲, ▼, ◀, ▶, HOME, STOP/START **Note:** Pushing each key for more than 0.5 sec enables Repeat Mode

Display panel and keys



SCAN : Press to enter the scanning setting menu.

COUNTER : Press to enter the counter setting menu.

IMPRINT : Press to enter the imprinter setting menu.

OTHERS : Press to enter other setting menu.

HOME : Press to exit from the setting section and return to the ready status.
Also used to change the display language.

STOP/START : Used to stop or start scanning a document.

: Up to 32 characters can be displayed during scanning or setting.

▲ : Press to advance to the next mode in the selected menu.

▼ : Press to return to the previous mode in the selected menu.

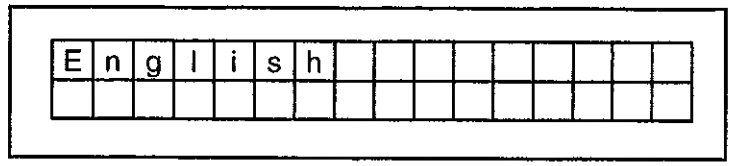
▶ : Press to advance to the next value in the selected mode.

◀ : Press to return to the previous value in the selected mode.

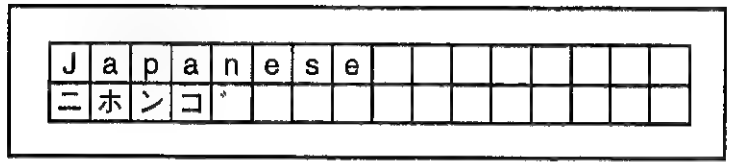
Fig. 9 - 1

Setting the language

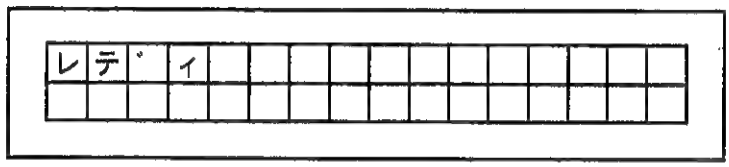
1) Turn the power on while pressing the HOME key.



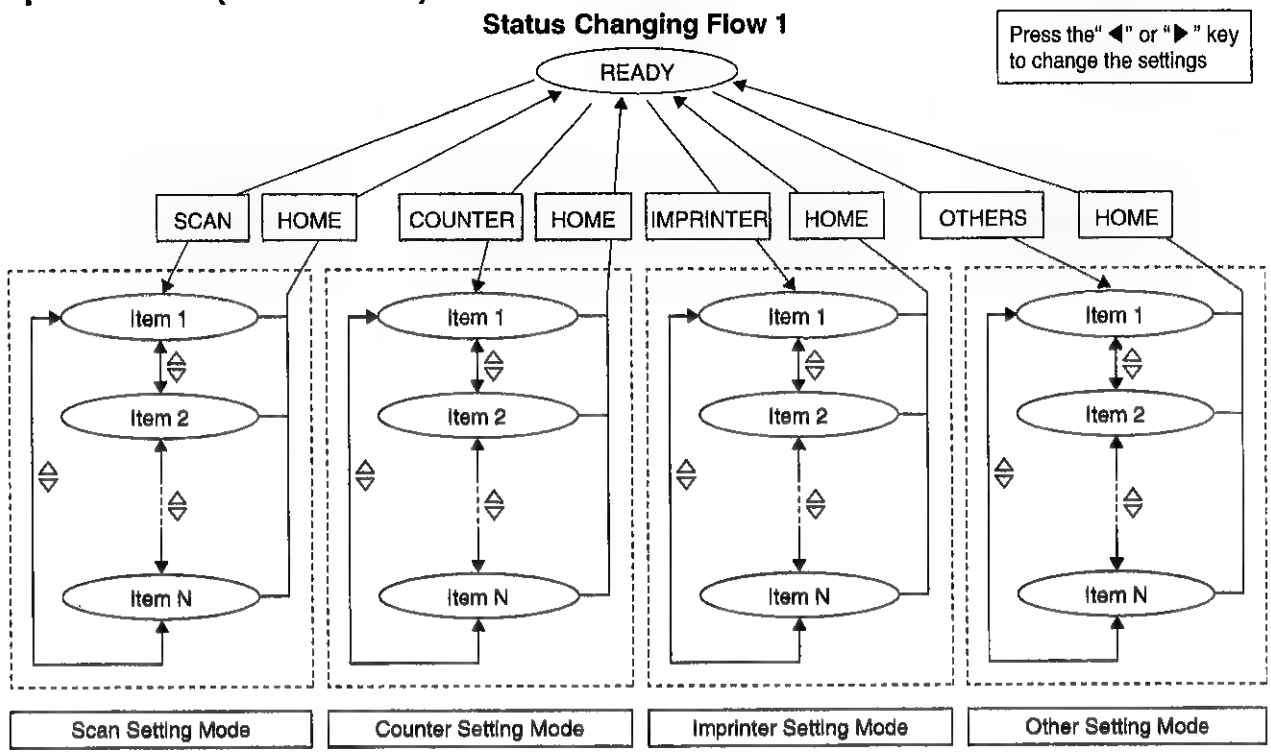
2) Use the "▲" key or the "▼" key to select "English", "Japanese" or "German".



3) Press the HOME key.
   - The display will change to the selected language, then the scanner will be ready.
   - This setting will remain until it is changed to another setting.



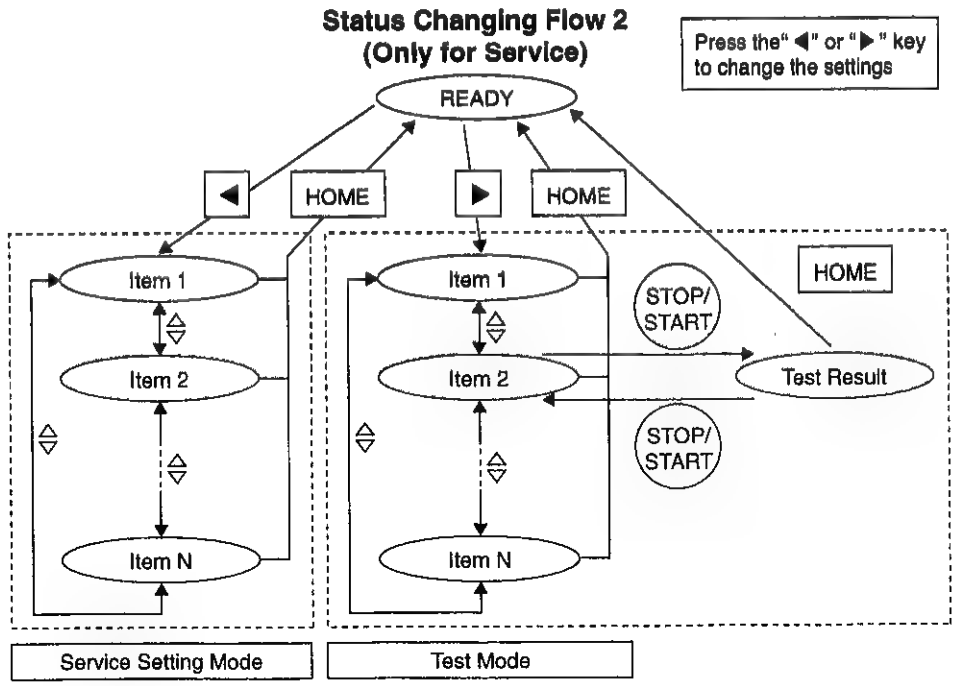
9.2 Operation-1 (User Mode)



By pressing another key, you can enter the other Setting Mode directly, without returning back the READY Mode. The Imprinter Setting Mode will operate only if the Imprinter (optional) has been installed in the Main Unit (KV–S6045W(U)/KV-S6040W(U)).

9.3 Operation-2 (Service Mode)

To enter Service Mode, turn on the Scanner while pressing the SCAN and the OTHER keys simultaneously. Service Mode includes the Service Setting Mode and Test Mode. The Service Setting Mode offers functions that are not available in Normal Mode. The Service Setting Mode has a counter display and changing the correction values, and so on. The Test Mode has a scanning test and EEPROM initialization and so on. The Service Setting Mode can be available until the power is turned off.



9.4 Setting List

9.4.1 Setting Mode and Item (User Mode)

Mode		Item	Setting Contents (by pushing the " ▶ " or " ◀ " key)										Default
Scan Setting Mode	1	F. Brightness	Host	D4	D3	D2	D1	Normal	L1	L2	L3	L4	Host
	2	F. Emphasis	Host	Smooth	None	Low	Medium	High					Host
	3	F. Contrast	Host	H4	H3	H2	H1	Norm	L1	L2	L3	L4	Host
	4	F. Halftone	Host	Binary	Dither 64	Dither 16	Halftone Dot 32	Halftone Dot 64	Error diffusion				Host
	5	B. Brightness	Host	D4	D3	D2	D1	Normal	L1	L2	L3	L4	Host
	6	B. Emphasis	Host	Smooth	None	Low	Medium	High					Host
	7	B. Contrast	Host	H4	H3	H2	H1	Norm	L1	L2	L3	L4	Host
	8	B. Halftone	Host	Binary	Dither 64	Dither 16	Halftone Dot 32	Halftone Dot 64	Error diffusion				Host
	9	Noise Reduct	Host	None	1x1	2x2	3x3	4x4	5x5	6x6			Host
	10	Double Feed	Host	Not detect	Detect								Host
	11	Feed Speed	Normal	Slow									Normal
	12	Black Line	Host	Disable	Enable								Host
	13	Scanning Mode	Actual	Fit to Page									Actual
	14	Scan Method	Host	Flatbed									Host
	15(a)	Select Memory for saving scan condition	Memory1	Memory2									Memory1
	15(b)	Set saving scan condition	Exec										
	16	Load Setting for scan condition	Memory1	Memory2	Default								Memory1
Counter Setting Mode	1	Disp. Counter	Scan	User									Scan
	2	Set User Counter	0 –										0
		Set Increment value for User Counter	+1 – +9										+1
		Clear User Counter	Clear										
Imprinter Setting Mode	1	Pre Imprinter	Host	Count									Host
	2	Pre Imprinter position	0 – 72 Char										0
Other Setting Mode	1	Version											
	2	Buzzer	ON	OFF									ON
	3	SCSI ID	0 – 7										
	4	Terminator	Enable	Disable									
	5	Clean Roller Warning	%										0%
		Clear "Clean Roller Warning"	Clear										
	6	Replace Roller Warning	%										0%
		Clear "Replace Roller Warning"	Clear										
	7	Product ID In case of KV-S6045	KV-S6045	KV-SS55EX	KV-SS55	KV-SS25	KV-SS65EXN	KV-SS65N	KV-SS50EX	KV-SS50			KV-S6045
			KV-SS60EXN	KV-SS60N	KV-SS855	KV-S2055							
	7	Product ID In case of KV-S6040	KV-S6040	KV-SS50EX	KV-SS50	KV-SS60EXN	KV-SS60N	KV-SS855	KV-S2055				KV-S6040
	8	Double feed detector sensitivity	Normal	High Sensitivity	Low Sensitivity								

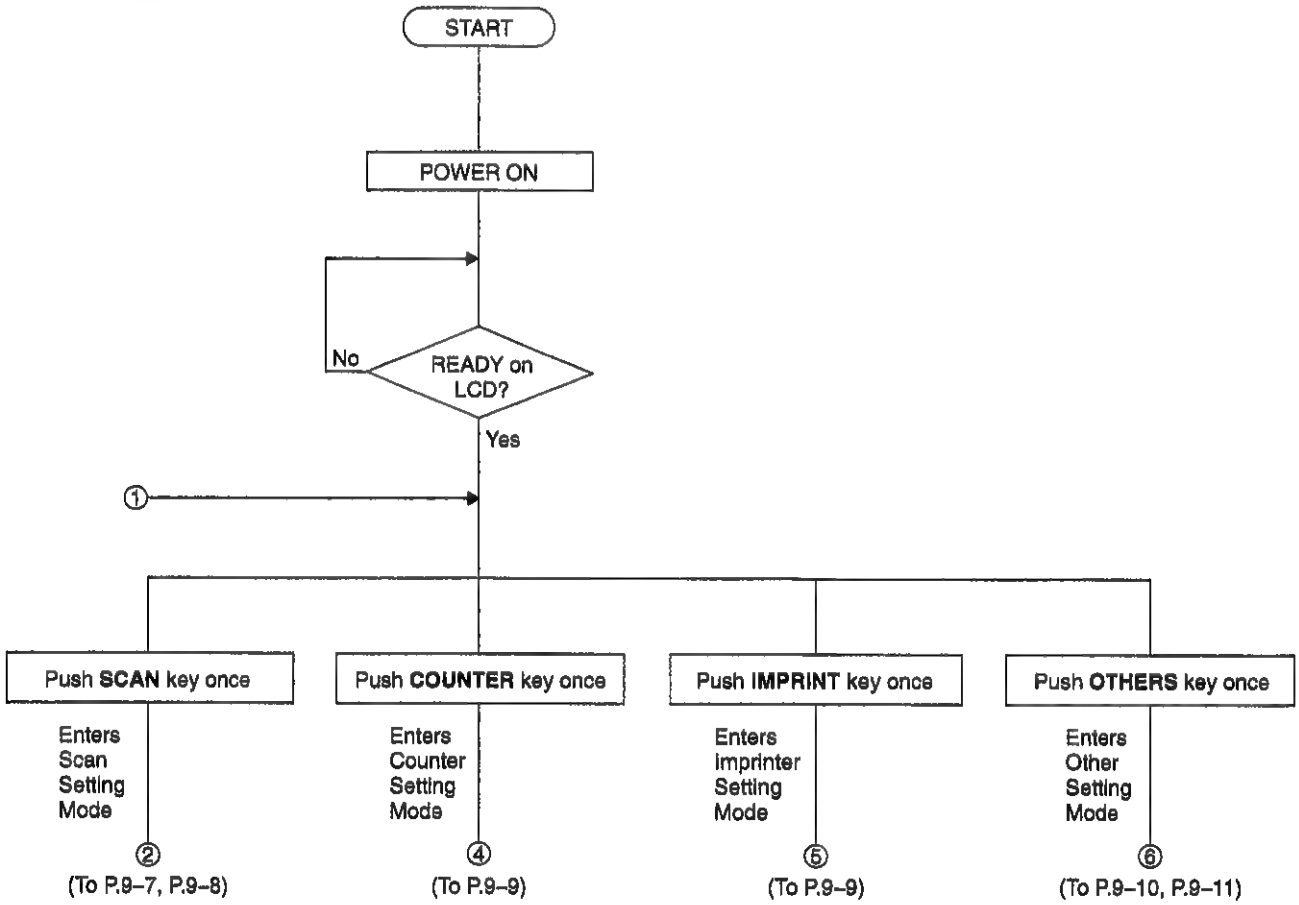
The Imprinter Setting Mode can be entered only if the Impriter is installed.

9.4.2 Setting Mode and Item (Service Mode and Test Mode)

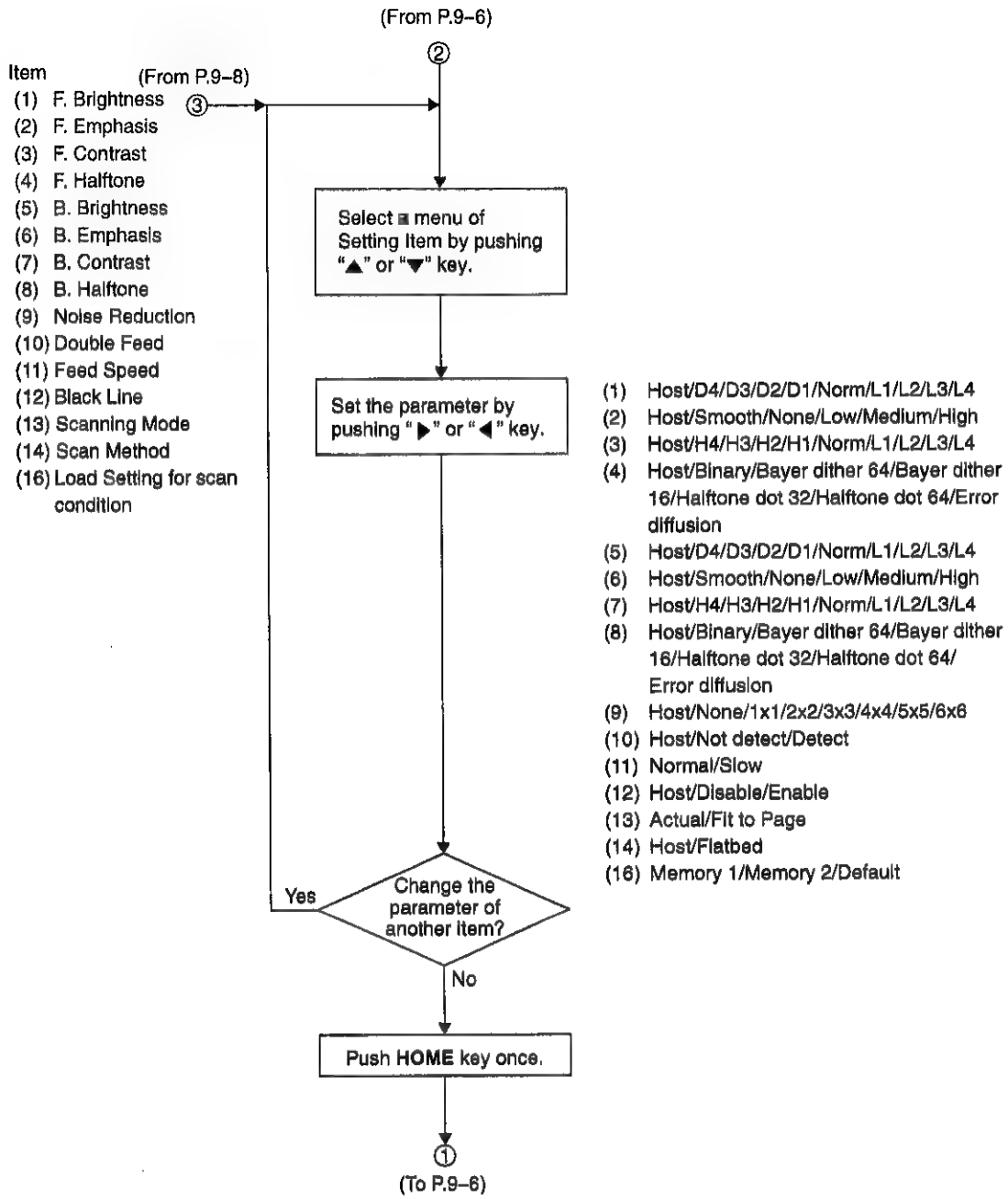
Mode		Item	Setting Contents (by pushing the " ▶ " or " ◀ " key)								Default
Service Mode Setting	1	System Counter									
	2	Warning Setting for Cleaning Roller	5000 – (MAX) 1000000								50000
	3	Warning Setting for Replacing Roller	5000 – (MAX) 1000000								300000
	4	Detect Size for adjusting position	A4	Letter							
	5	Adjust value for Front Width manually	1 – 128								
	6	Adjust value for Front H.position manually	8 - 248								
	7	Adjust value for Front V.Position manually	28 – 228								
	8	Adjust value for Paper Lenght manually	28 – 228								
	9	Adjust value for Back H.Position manually	118 – 138								
	10	Adjust value for Back V.Position manually	28 – 228								
	11	Adjust value for FB H.Position manually	8 - 248								
	12	Adjust value for FB V.Position manually	28 – 228								
	13	Adjust value for FB Length manually	28 – 228								
	14	Lamp	Green	Red							Green
	15	Set Default	Exec								
Test Mode	1	Feed Test (Set Resolution and Test)	100 – 600	START							200
		Feed Test (Set Paper Size and Test)	A4	A5	A6	B4	B5	B6		Max	A4
			Ltr	Lgl	A3	Ldr	START				
		Feed Test (Set Length Control and Test)	OFF	ON	START						
	2	Carriage Test (Set Resolution and Test)	100 – 600	START							
		Carriage Test (Set Paper Size and Test)	A4	A5	A6	B4	B5	B6	Ltr	Ldr	
			Lgl	A3	START						
	3	CCD Test AMP1	x1	x2		START					
		CCD Test AMP2	0 – 255	START							
	4	B.CIS LED	0 – 255	START							
	5	F.CIS Black Level	0 – 255	START							
	6	B.CIS Black Level	0 – 255	START							
	7	Document Sensor	START								
	8	Sensor Sensitive Level	START								
	9	Door & Home Sensor	START								
	10	Double Feed Sensitive Level	0 – 255	START							
	11	Hopper Test	START								
	12	Conveyor Motor	START								
	13	Feed Motor	START								
	14	Adjust Width Automatically	START								
	15	Adjust Front H.Position Automatically	START								
	16	Adjust Front V.Position Automatically	START								
	17	Adjust Paper Length Automatically	START								
	18	Adjust Back H.Position Automatically	START								
	19	Adjust Back V.Position Automatically	START								
	20	Adjust FB H.Position Automatically	START								
	21	Adjust FB V.Position Automatically	START								

Mode		Item	Setting Contents (by pushing the " ▶ " or " ◀ " key)								Default
Test Mode	22	Adjust FB Length Automatically	START								
	23	Adjust All Position & Length Automatically	START								
	24	Aging	START								
	25	Init. EEPROM	START								
	26	Adjust Shading Automatically	START								
	27	Adjust Double Feed detector	START								

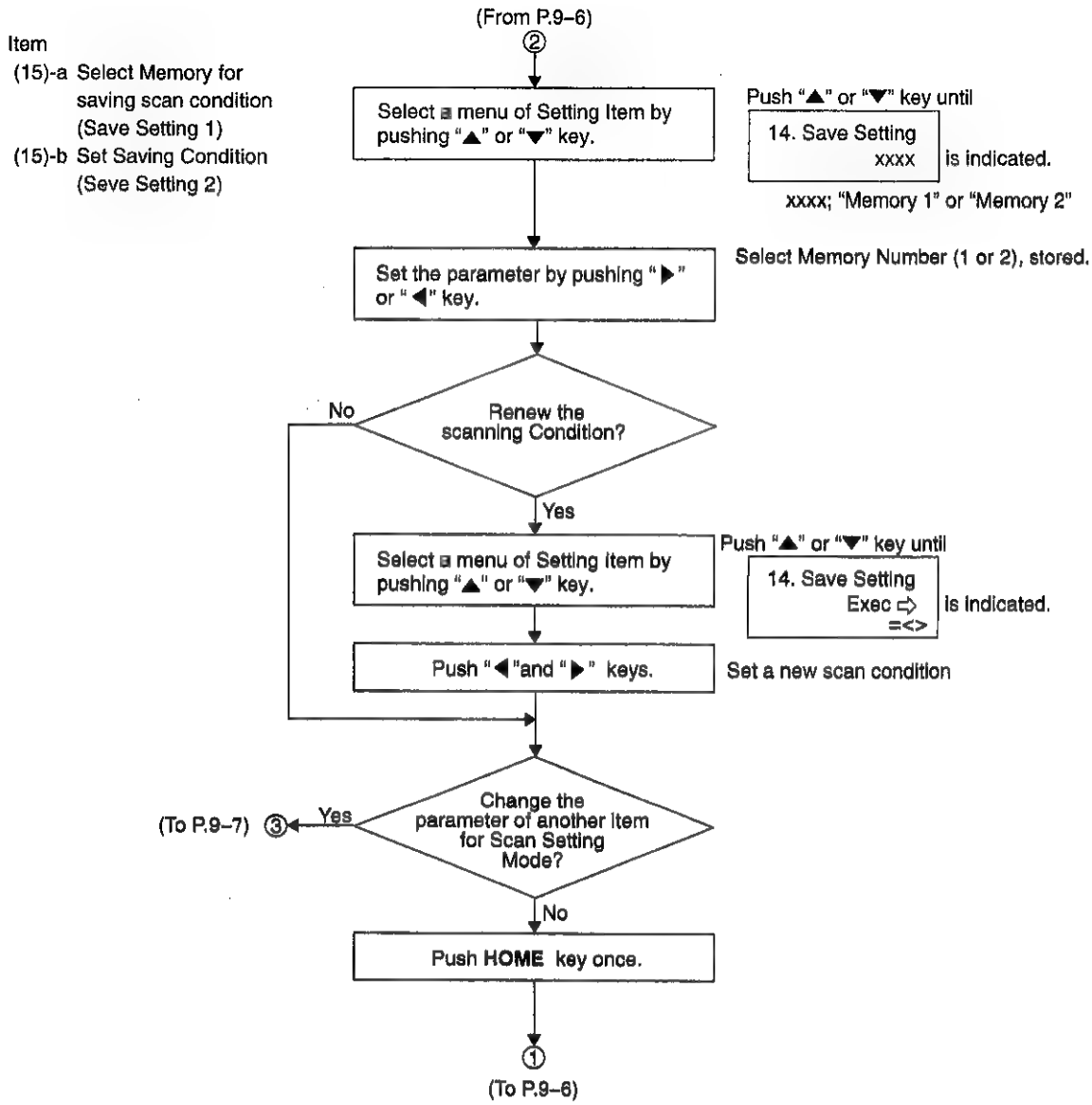
9.5 Setting Operation (User Mode)



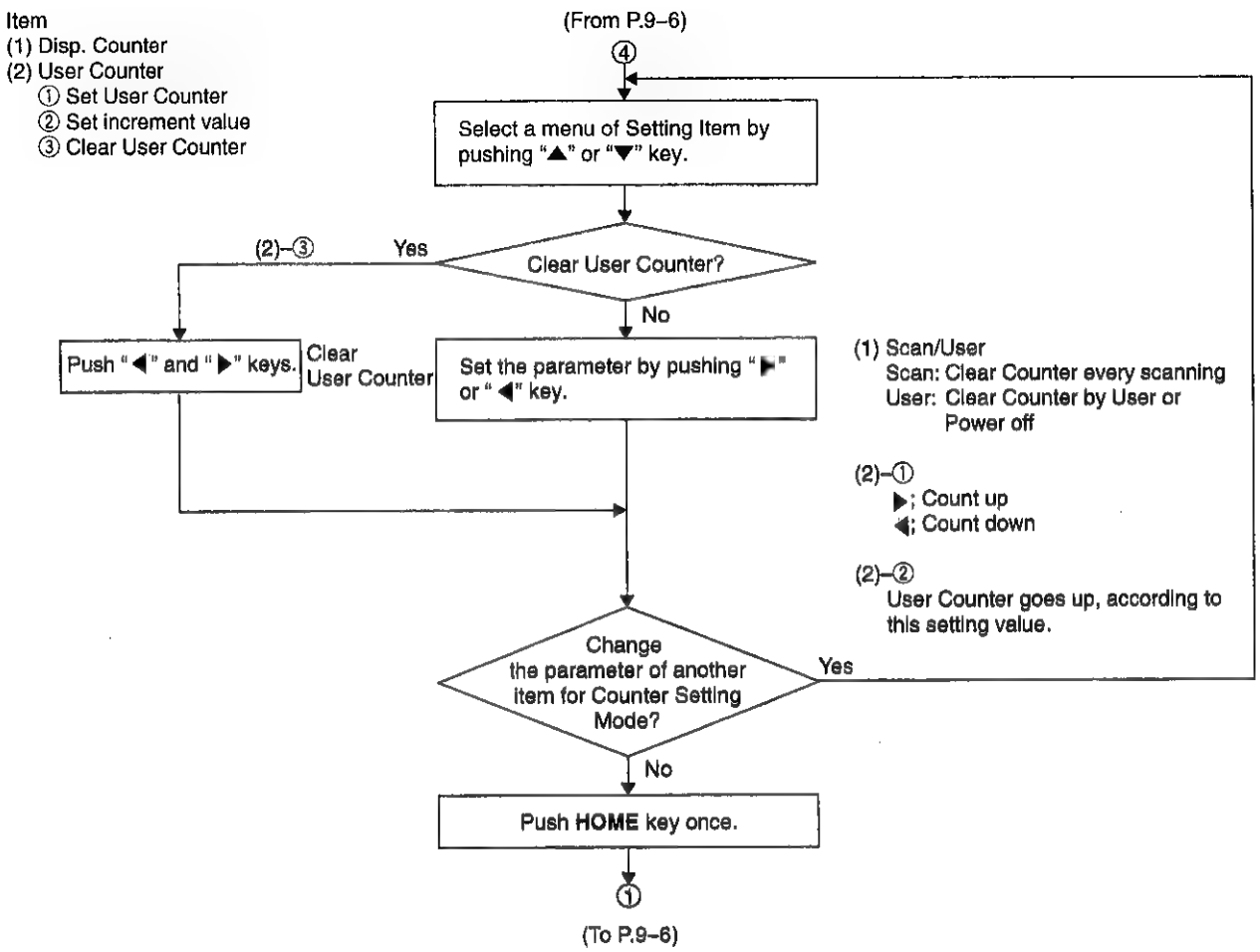
9.5.1 Scan Setting Mode-1



9.5.2 Scan Setting Mode-2

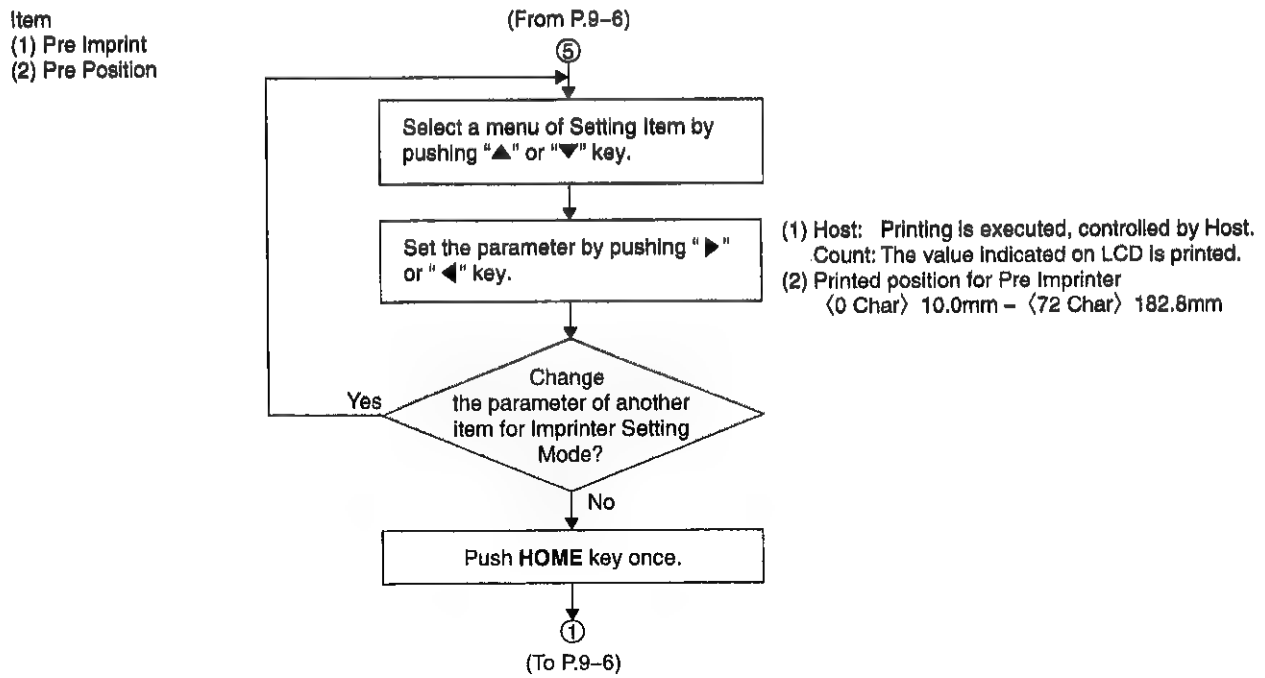


9.5.3 Counter Setting Mode



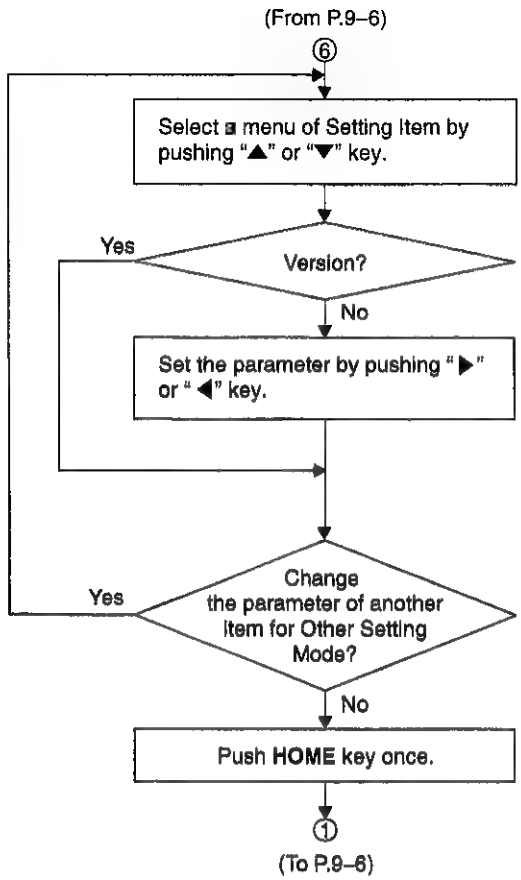
9.5.4 Imprinter Setting Mode (Option)

Only in case Pre Imprinter is provided to KV-S6045(S6040) Series, the parameter can be set in this mode.



9.5.5 Other Setting Mode-1

Item
(1) Version
(2) Buzzer
(3) SCSI ID
(4) Terminator
(7) Product ID
(8) Double Feed detector sensitivity



(1) Version indication
Ex. Version M1.00 F1.00 ⇨ M; Mechacon Firm ware Version
F; Pre Imprinter Firm ware Version

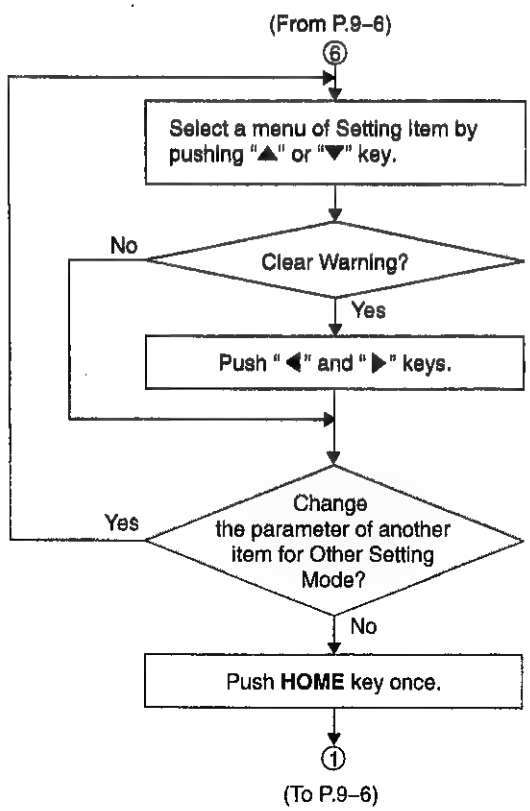
(2) ON/OFF
(3) 0–7
(4) Disable/Enable
(7)
[KV-S6045]
KV-S6045 ⇔ KV-SS55EX ⇔ KV-SS55 ⇔ KV-SS25 ⇔ KV-SS65EXN ⇔ KV-SS65N ⇔ KV-SS50EX ⇔ KV-SS50 ⇔ KV-SS60EXN ⇔ KV-SS60N ⇔ KV-SS855 ⇔ KV-S2055⇔KV-S6045

[KV-S6040]
KV-S6040 ⇔ KV-SS50EX ⇔ KV-SS50 ⇔ KV-SS60EXN⇔ KV-SS60N ⇔ KV-SS855 ⇔ KV-S2055 ⇔ KV-S6040

(8) Normal/High sensitivity/Low sensitivity

9.5.6 Other Setting Mode-2

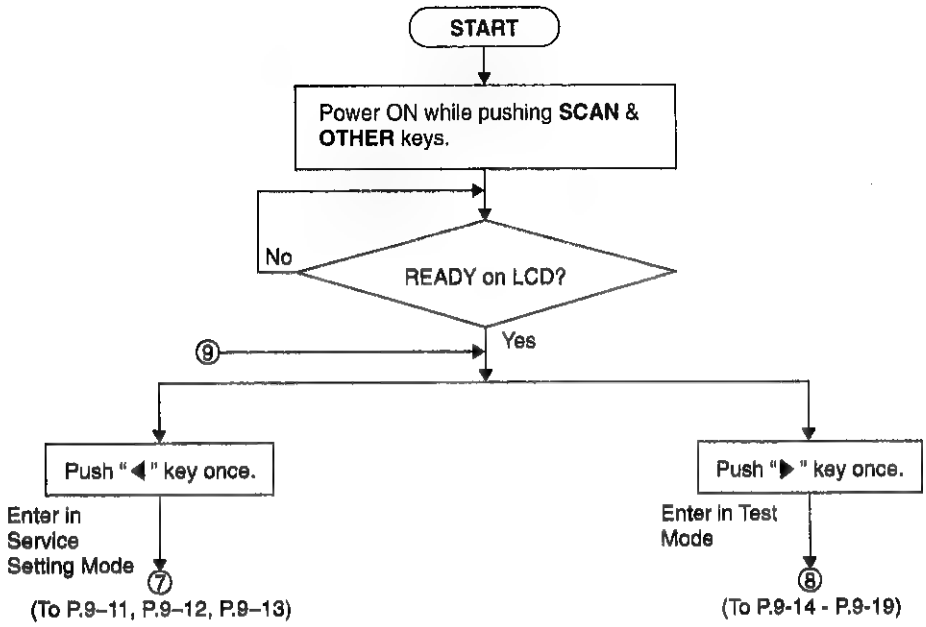
Item
(5) Clean Roller
① Warning
② Clear "Clean Roller Warning"
(6) Replace Roller
① Warning
② Clear "Replace Roller Warning"



(5)-①; Confirm % based on the value of "Warning Setting for Cleaning Roller" in Service Mode Setting
(6)-①; Confirm % based on the value of "Warning Setting for Replacing Roller" in Service Mode Setting

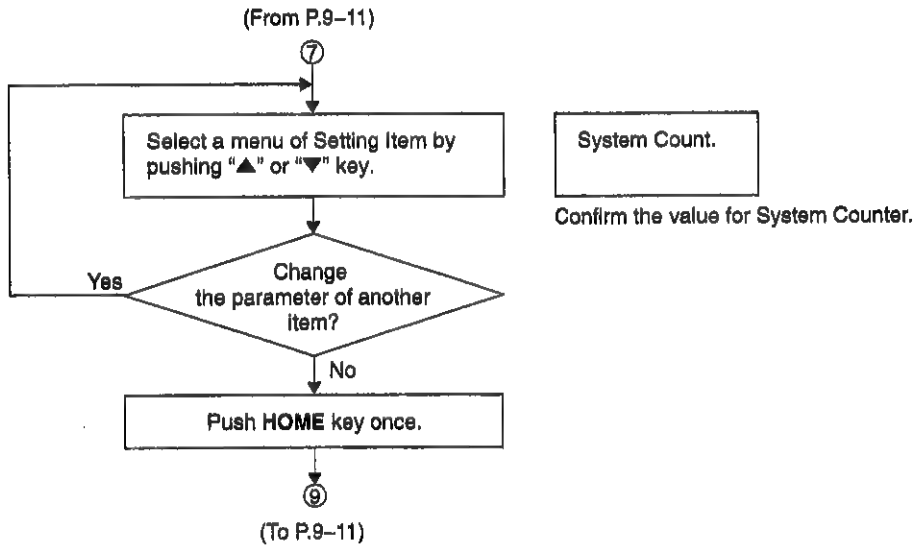
(5)-② (6)-② Clear Warning

9.6 Setting Operation(Service Mode)



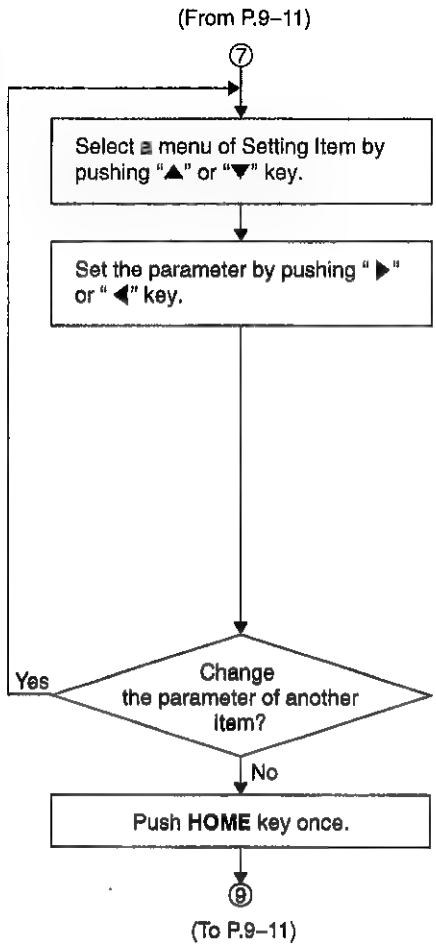
9.6.1 Service Mode Setting-1

(1) System Counter



9.6.2 Service Mode Setting-2

(2) Warning Setting for Cleaning Roller
(3) Warning Setting for Replacing Roller
(4) Detect Size for Adjusting Position
(5) Adjust value for Front Width manually
(6) Adjust value for Front H. Position manually
(7) Adjust value for Front V. Position manually
(8) Adjust value for Paper Length manually
(9) Adjust value for Back H. Position manually
(10) Adjust value for Back V. Position manually
(11) Adjust value for FB H. Position manually
(12) Adjust value for FB V. Position manually
(13) Adjust value for FB Length manually
(14) Lamp

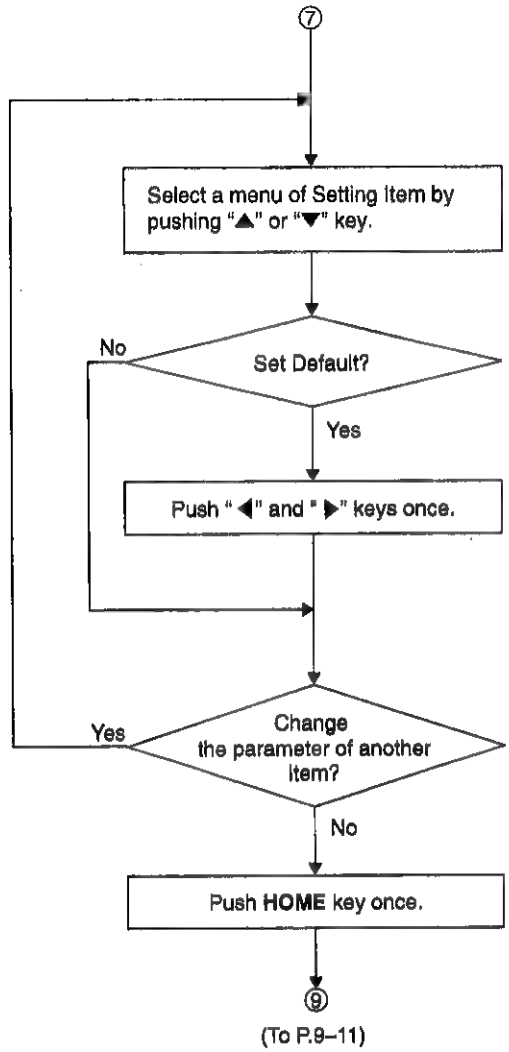


(2) Set scanning paper value to clean roller.
Default; 50,000_
(3) Set scanning paper value to replace roller
Default; 300,000_
(4) A4/Letter
(5) ◀; 0.1% Reduce
▶; 0.1% Expand
(6) ▶; 0.1mm to the right
◀; 0.1mm to the left
(7) ▶; 0.1mm to Lower side
◀; 0.1mm to upper side
(8) ▶; 0.1% Longer
◀; 0.1% Shorter
(9) Same as (5)
(10) Same as (6)
(11) ▶; 0.1mm to the right
◀; 0.1mm to the left
(12) ▶; 0.1mm to lower side
◀; 0.1mm to upper side
(13) ▶; 0.1% longer
◀; 0.1% Shorter
(14) Green/Red

9.6.3 Service Mode Setting-3

(15) Set Default

(From P.9-11)

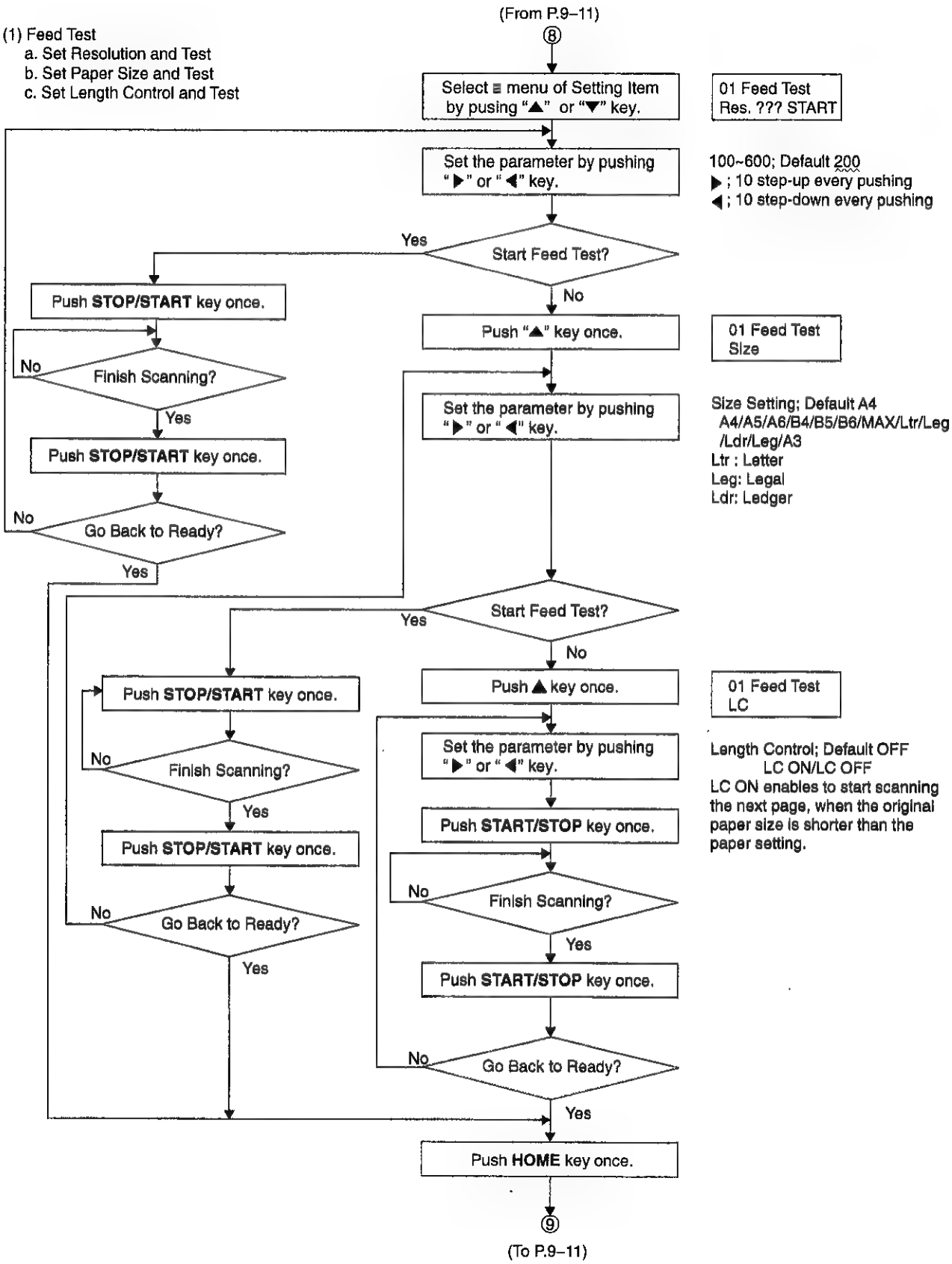


(To P.9-11)

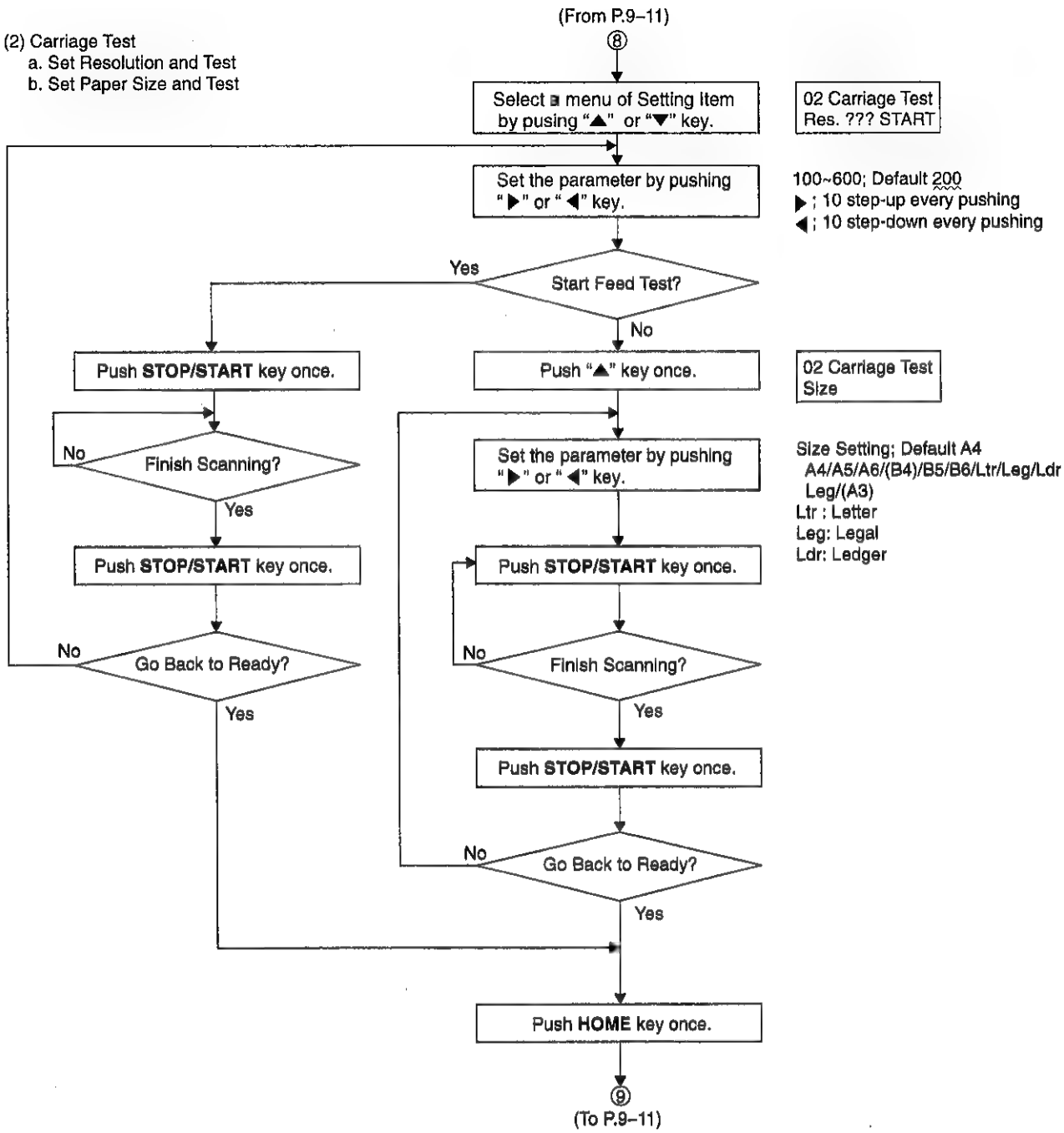
Pushing "◀" and "▶" keys changes setting on LCD into default except for the following contents.

- SCSI ID 0-7
- Terminator ON/OFF
- System Counter
- Adjust value for scanning position
- Language on LCD

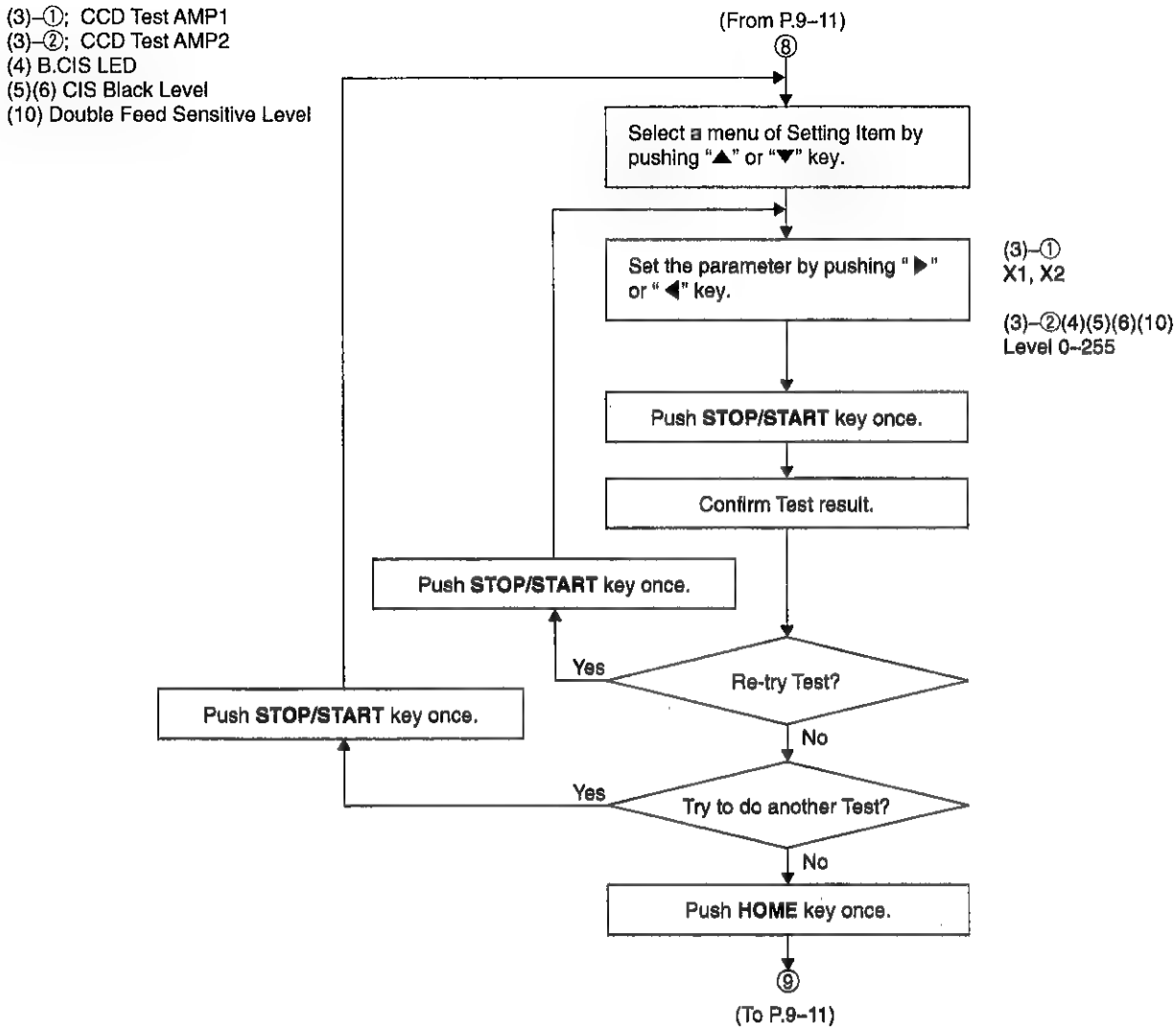
9.6.4 Test Mode-1



(2) Carriage Test
a. Set Resolution and Test
b. Set Paper Size and Test

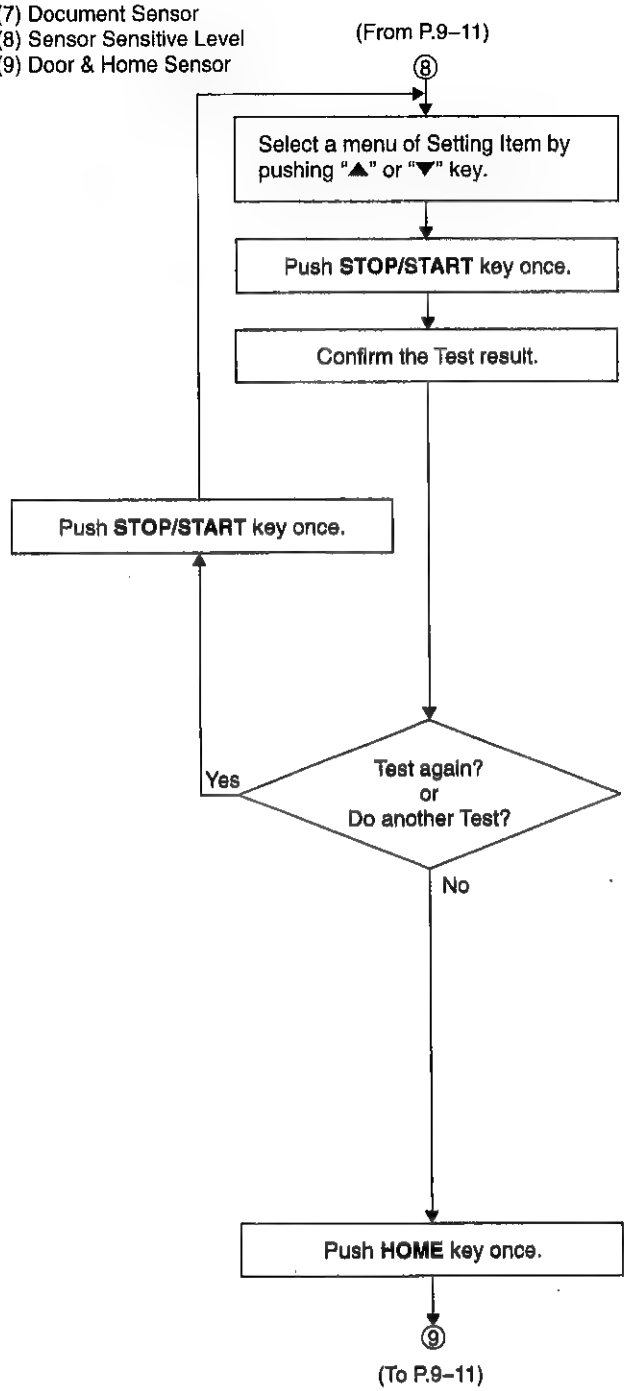


9.6.5 Test Mode-2



9.6.6 Test Mode-3

(7) Document Sensor
(8) Sensor Sensitive Level
(9) Door & Home Sensor



Select Sensor Test ((7) or (8) or (9))

Execute Sensor Test

(7)

P	0	1	2	3	4	5	6	7	8	S	E				
1	0	1	0	1	1	0	1	0	0	0	0				

P: Status of Paper Detector
0,1, 2, 3, 4, 5, 6, 7 ,8 : Each status of Size Sensors 0–8
* When this status value is "1", it means the paper is in this scanner.
S : Status of Starting Position Sensor
E : Status of Ending Position Sensor

(8)

P	0	1	2	3	4	5	6	7	8	S	E				
x	3	3	3	3	3	3	3	3	3	3	3				

P: Status of Paper Feed Sensor (x: No adjustment for the level)
S: Status of Starting Positon Sensor; 0–F (Adjustment level; F: Darker)
E: Status of Ending (Front) Position Sensor; 0–F (Adjustment level; F: Darker)
0, 1, 2, 3, 4, 5, 6, 7, 8 : Each status of Size Sensors 0–8;

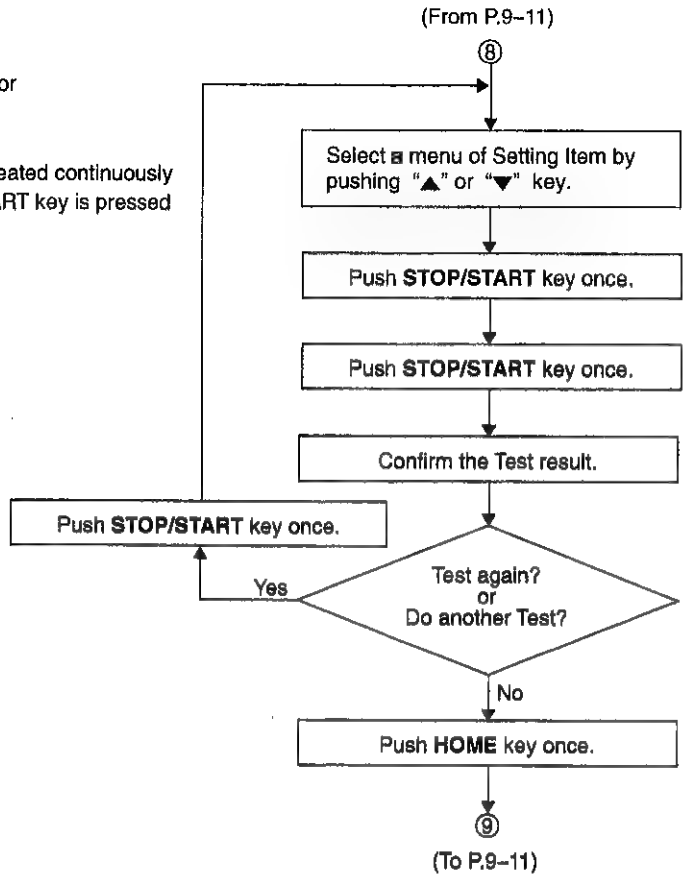
(9)

F	A	T	D							H		C		R
0	1	0	0							1		0		0

F: Status of Front Door
A: Status of ADF Door
T: Status of Top Door
D: Document Cover
*When this status value is "1", ll means door open.
H: Hopper Position Sensor (Value "1" means Hopper is in home)
C: Carriage Position Sensor (Value "1" means Carriage is in home)
R: Retard Position Sensor (Value "1" means Retard position is released)

9.6.7 Test Mode-4

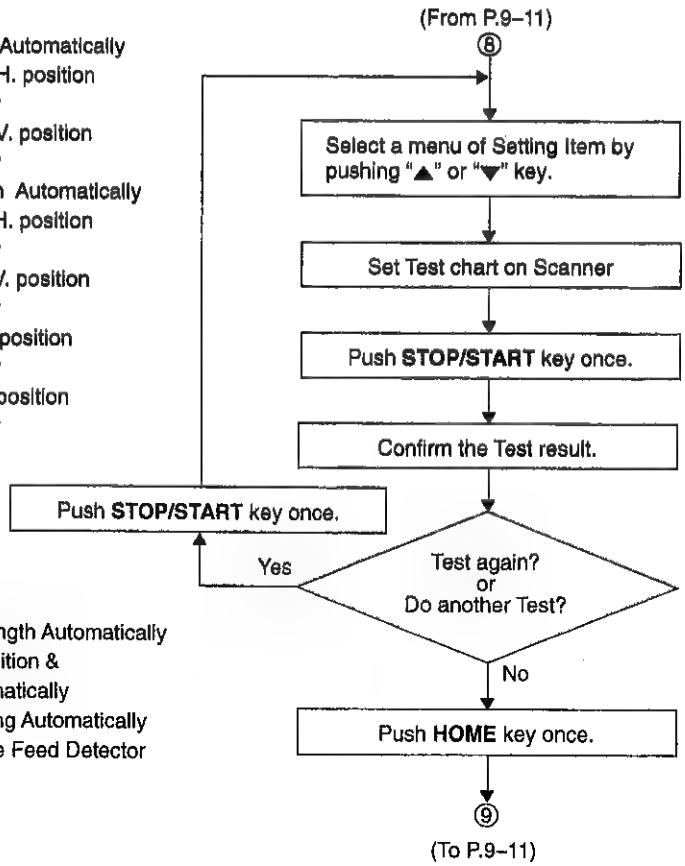
*(11) Hopper
*(12) Conveyor Motor
*(13) Feed Motor
(24) Aging
*The test will be repeated continuously until the STOP/START key is pressed



9.6.8 Test Mode-5

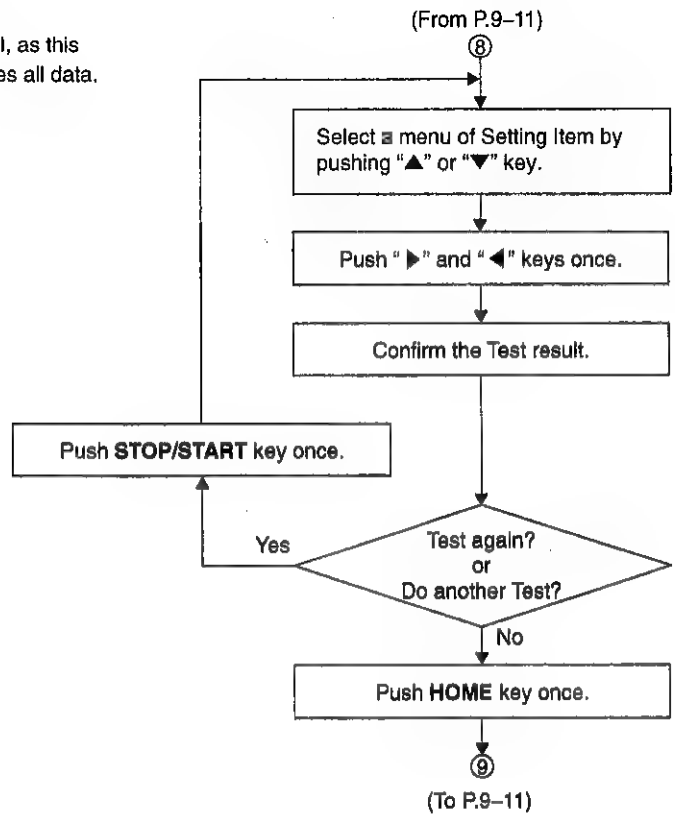
(14) Adjust Width Automatically
(15) Adjust Front H. position Automatically
(16) Adjust Front V. position Automatically
(17) Adjust Length Automatically
(18) Adjust Back H. position Automatically
(19) Adjust Back V. position Automatically
(20) Adjust FB H. position Automatically
(21) Adjust FB V. position Automatically

(22) Adjust FB Length Automatically
(23) Adjust All position & Length Automatically
(26) Adjust Shading Automatically
(27) Adjust Double Feed Detector



9.6.9 Test Mode-6

(25) Init. EEPROM
*Please be very careful, as this test operation initializes all data.



9.7 Error Code

Error Code Outline

ST1	Error Content
0x0-	Communication Error
0x1-	Paper Jam Error
0x2-	Door Open Error
0x3-	Mechanical Function Error
0x4-	Paper (Document) Sensor Error
0x5-	Scanning Error
0x6-	-
0x7-	-
0x8-	Hardware Error
0x9-	Hardware Error
0xA-	-
0xB-	-
0xC-	-
0xD-	-
0xE-	-
0xF-	-

Table 9-1

Note: (1) How to confirm Table 9-1
(ex.)
0x0-shows Communication Error for
00 to 0A of ST1 bit.
(2) "–" in Error Content is not used.

Error Code

Classified Code	ST1	ST2	ST3	ST4	Content		
-	00	x	x	x	No error		
-	01	x	00	00	System Reset		
-	03	00	x	00	Mechanical Function Command Error	Undefined Code	(ST3=code)
-	–	01	x	x		Transmitted Data Length	(ST3, 4=length)
-	–	02	x	x		Parameter Contents	(ST3, 4=position)
-	04	00	x	00	Imprint Command Error	Undefined Code	(ST3=code)
-	–	01	x	x		Transmitted Data Length	(ST3, 4=length)
-	–	02	x	x		Parameter Contents	(ST3, 4=position)
-	06	00	00	00	Imprint Communication Error		
-	07	00	00	00	Imprint Data Error		
-	09	00	00	00	Bar-code Detection Error		
-	0A	00	00	00	Stop by the STOP/START Key		
U10	10	00	00	00	No Paper Error		
U11	11	x	00	00	Paper Feed Jam(when paper does not reach Size Sensor 0): ST2 shows the rest numbers (approx.) of paper.		
U12	12	x	00	00	Jam 1 (when paper does not reach Starting Position Sensor): ST2 shows the rest numbers (approx.) of paper.		
U14	14	x	00	00	Jam 3 (when paper does not reach Ending Position Sensor): ST2 shows the rest numbers (approx.) of paper.		
U16	16	x	00	00	Scan-out Jam 1 (when paper does not pass Ending Position Sensor): ST2 shows the rest numbers (approx.) of paper.		
U18	18	x	00	00	Leave the paper in this scanner	* (ST2: Paper position Information)	
U20	19	00	00	00	Skew Error		
U21	1A	00	00	00	Paper Size Error		
U22	1B	00	00	00	Paper Length Error		
U23	1C	00	00	00	Double Feed Error	(ST2:0=Original at wait position 1=No original at wait position 2=Length 3=Supersonic Frequency)	
U30	20	00	00	00	Front Door Open		

Classified Code	ST1	ST2	ST3	ST4	Content	
U31					ADF Door Open	
U34	24	00	00	00	Imprinter Door Open	
U35	25	00	00	00	Document Cover Open	
F40	30	00	00	00	Hopper Drive Error	
F41	31	x	00	00	Carriage Drive Error	(ST2:0 = Reverse direction 1=Forward direction)
F50	40	00	00	00	Size Sensor 0 Error	
F51	41	00	00	00	Staring Posiiton Sensor Error	
F55	45	00	00	00	Ending Position Sensor Error	
F60					Front-side gain Error	
F71	48				Size Sensor 1 Error	
F72	49				Size Sensor 2 Error	
F73	4A				Size Sensor 3 Error	
F74	4B				Size Sensor 4 Error	
F75	4C				Size Sensor 5 Error	
F76	4D				Size Sensor 6 Error	
F77	4E				Size Sensor 7 Error	
F78	4F				Size Sensor 8 Error	
F80	60	x	x	00	Double Feed Sensor Error	(ST2: DA output Value, STS3: AD input value)
F61	51	00	00	00	Front-side Black Level Error	
F63	53	00	00	00	Back-side Black Level Error	
H68	54	00	x	00	Front-side Lamp Lighting Error	(STS3: AD input value)
F69	55	x	x	00	Back-side Lamp Lighting Error	(STS2: Lighting Value, STS3: AD input value)
U41	58	00	00	00	Scanning Position Adjustment (Auto Mode) Error	
F10	80	00	00	00	Program ROM Error on MAIN CONTROL Board	
F11	81	x	x	x	Work RAM Error on MAIN CONTROL Board	(ST2: Data, ST3, 4: Address)
F17	87	00	00	00	On Board DRAM Error	
F18	88	00	00	00	SIMM 1 Error	
F19	89	00	00	00	SIMM 2 Error	
F20	8A	x	x	x	Bar-code RAM Error	(ST2: Data) (ST3, 4: Address)
F21	8B	x	x	x	Black Shading RAM Error	(ST2: Data) (ST3, 4: Address)
F22	8C	x	x	x	White Shading RAM Error	(ST2: Data) (ST3, 4: Address)
F23	8D	x	x	x	A-Buffer RAM Error	(ST2: Data) (ST3, 4: Address)
F24	8E	x	x	x	B-Buffer RAM Error	(ST2: Data) (ST3, 4: Address)
F25	8F	x	x	x	C-Buffer RAM Error	(ST2: Data) (ST3, 4: Address)
F26	90	x	x	x	Gumma RAM Error	(ST2: Data) (ST3, 4: Address)
F27	91	x	x	x	MTF1 RAM Error	(ST2: Data) (ST3, 4: Address)
F28	92	x	x	x	MTF2 RAM Error	(ST2: Data) (ST3, 4: Address)
F29	93	x	x	x	MTF3 RAM Error	(ST2: Data) (ST3, 4: Address)
F30	94	x	x	x	ED1 RAM Error	(ST2: Data) (ST3, 4: Address)
F31	95	x	x	x	ED2 RAM Error	(ST2: Data) (ST3, 4: Address)
F34	98	00	00	00	EEPROM Error	
F35	99	00	00	00	SCSI TIARA Error	
F36	9A	00	00	00	GA Sensor Error	
F37	9B	00	00	00	GA Image Error	
U50	A0	00	00	00	Not installed I/F Board	

Table 9-2

SECTION 10
TROUBLESHOOTING

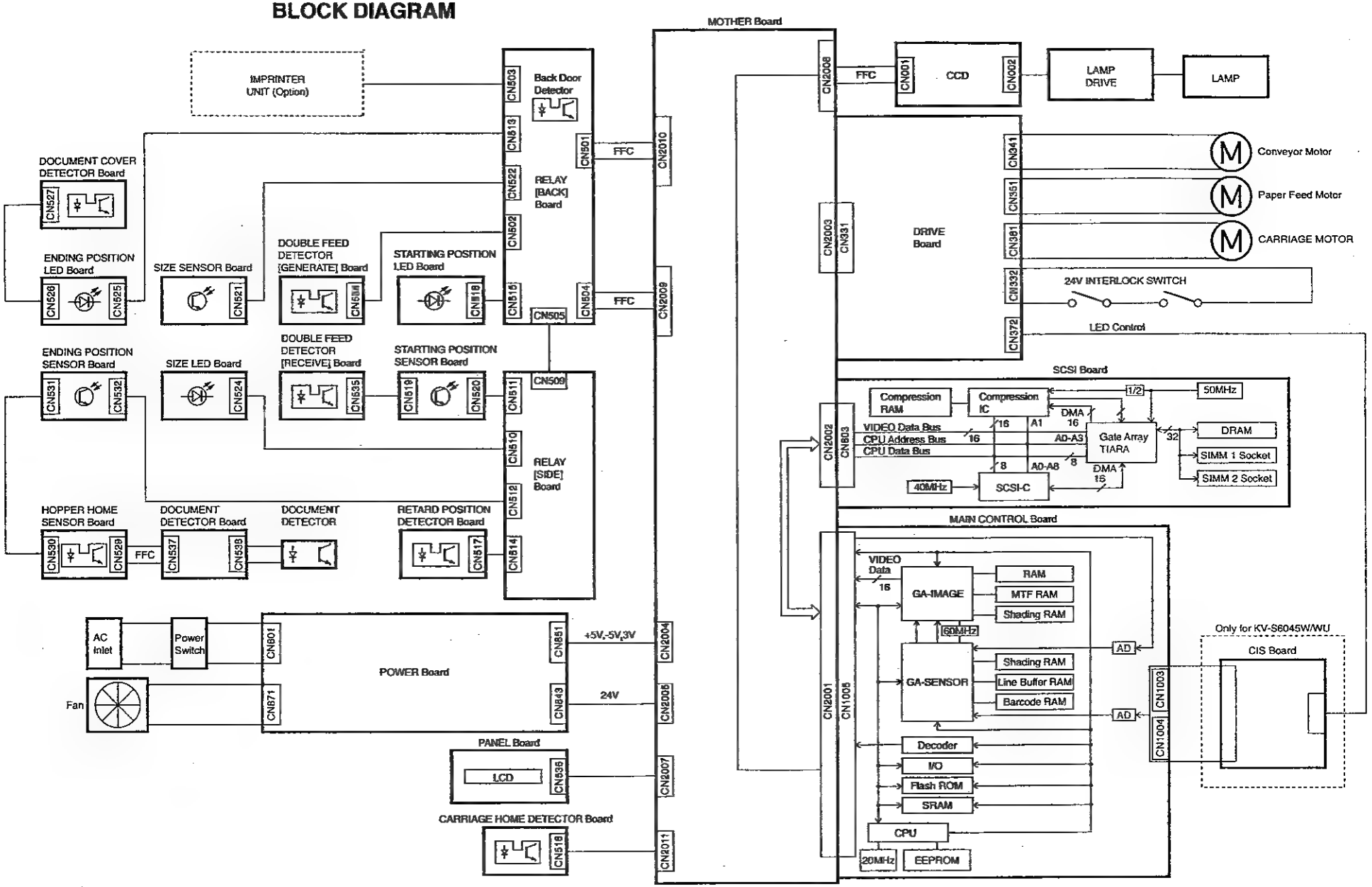
Error Code for KV-S6045(S6040) as shown in Table 9-1. (See 9.7)

Classified Code	Error Code				Possible Cause	Check Point
U10	10	00	00	00	Paper Detector does not work. 1) Paper has not been properly set. 2) The back side of the last scanning is black. 3) A connector for the sensor signal is loosen. 4) Paper Detector is damaged.	1) Fix the torn or ripped paper. 2) Place a white sheet of paper on the bottom sheet of the original, as a dummy. 3) Confirm operation of the sensor in Test Mode. If the sensor does not work, the connector has come loose. Attach the connector correctly. 4) Check whether the cable and or Sensor board are broken.
U11	11	xx	00	00	Paper does not feed in the correct timing. 1) Slip caused by dirt of the roller. 2) Conveyor has not been set properly. 3) Double Feed. 4) Sensor error.	1) Replace the Paper Feed Roller, Separation Roller, or Retard Roller if they are worn down. 2) Set conveyor properly. 3) Clean the Separation Roller and Retard Roller. Confirm whether the Retard Roller is properly set. Replace the Paper Feed Roller, Separation Roller, or Retard Roller if they are worn down. 4) Clean any paper dust off of the sensor section.
U12	12	xx	00	00	Paper does not reach to the Starting Position Sensor. 1) Paper Feed Roller, Separation Roller, and Retard Roller are slipping. 2) Following Paper which cause Double Feed is left, Inside unit. 3) Sensor error.	1) Clean the Paper Feed Roller, Separation Roller, and Retard Roller. 2) Clean the Separation Roller and the Retard Roller. 3) Clean any paper dust on the sensor section.
U13	13	xx	00	00	Paper does not reach to the Ending Position Sensor. 1) Slip caused by dirt of the roller. 2) Sensor error. 3) Conveyor has not been properly installed.	1) Clean the Conveyor Roller. 2) Clean any paper dust on the sensor section. 3) Assemble the conveyor properly.
U16	16	xx	00	00	Paper does not pass the Ending Position Sensor. 1) Slip caused by dirt of the roller. 2) Sensor error. 3) Conveyor has not been properly installed.	1) Clean the Conveyor Roller. 2) Clean any paper dust on the sensor. 3) Assemble the conveyor properly.

Classified Code	Error Code				Possible Cause	Check Point
U18	18	xx	00	00	1) Paper remains in the equipment. 2) The Paper Detector is ON. ① LED is broken. ② Sensor is broken. Confirm the LED and the sensor operation state. Confirm steps: 1. Start the Doc Sensor Test in Test Mode. 2. Open the conveyor and shine a light on the sensor. If the sensor turns ON, there is a problem with the LED. If the sensor does not turn ON, there is a problem with the sensor. ③ Conveyor is not assembled correctly. ④ LED or Sensor is laid down. ⑤ Sensor is covered with paper dust.	1) Remove paper. 2) ① Replace the LED. ② Replace the Sensor. ③ Assemble the conveyor properly. ④ Replace the LED or sensor. ⑤ Clean any dust on the sensor section.
U30	20	00	00	00	U30 Error Code does not turn off even through the Front Door is closed. 1) Front Door Switch is not being correctly shut down. 2) Front Door Switch is broken.	1) Check that the Front Door Switch is not being correctly shut down. 2) Replace the Front Door Switch.
U31	21	00	00	00	U31 Error Code does not turn off even through the ADF Door is closed. 1) ADF Door Switch is not being correctly shut down. 2) ADF Door Switch is broken.	1) Check that the ADF Door Switch is not being correctly shut down. 2) Replace the ADF Door Switch.
U32	22	00	00	00	U32 Error Code does not turn off even through the Back Door is closed. 1) The connector to the Back Door Detector is loosen. 2) The Back Door Detector is broken.	1) Connect the cables properly. 2) Replace the sensor board.
U35	25	00	00	00	U35 Error Code does not turn off even through the Document Cover is closed. 1) The connector to the Document Cover Sensor is loosen. 2) The Flat-Bed Door Detector is broken.	1) Connect the cables properly. 2) Replace the sensor board.
F40	30	xx	00	00	The Hopper Home Sensor does not operate properly. 1) The connector to the HOPPER POSITION DETECTOR Board is not properly inserted. 2) The Hopper Home Detector is broken.	1) Mount the connector properly. 2) Replace the HOPPER POSITION DETECTOR Board.
F50 | F78	40 | 4F	00 | 00	00 | 00	00 | 00	1) Paper dust on the sensor section. 2) LED or sensor is laid down. 3) LED has reached the end of its useful life.	1) Clean the sensor section. 2) Straighten the LED or sensor. 3) Replace the LED.
F10	80	00	00	00	1) Program ROM is not correctly mounted. 2) Download has failed.	1) Remount ROM correctly. 2) ① Download again. ② Replace the Program ROM or the MAIN CONTROL Board.
F11	81	xx	xx	xx	Poor soldering around the Work RAM (IC1105,IC1106) on the MAIN CONTROL Board. (ST2: DATA) (ST3, 4: Address)	Replace the MAIN CONTROL Board.
F15	85	00	00	00	Download to Imprinter has failed.	① Replace the IMPRINTER Board. ② Confirm the cable connected to IMPRINTER Board. ③ Confirm MAIN CONTROL Board Imprinter I/F section.

Classified Code	Error Code				Possible Cause	Check Point
F17	87	00	00	00	Poor soldering around the D-RAM (IC610~ IC613) on the SCSI Board.	Replace the SCSI Board.
F18	88	00	00	00	Additional SIMMs are not mounted correctly.	Remount the SIMMs.
F19	89	00	00	00	Additional SIMMs are not mounted correctly.	Remount the SIMMs.
F20	8A	xx	xx	xx	1) Bar-code on paper is not clear. 2) Paper powder is on the scanning position. 3) The Bar-code is out of Code 39, ITV or CODABAR. 4) The location of the Bar-code has been incorrectly set.	1) Make the Bar-code clear. 2) Clean the reading section. 3) Out of specification. 4) Set the location correctly.
F21 | F37	8B | 9B	xx | xx	xx | xx	xx | xx	Poor soldering on the MAIN CONTROL Board.	Replace the MAIN CONTROL Board. Error Code device detected by Error Code ST1. 8B IC1202 8C IC1203 8D IC1205 8E IC1206 8F IC1207 90 IC1211 91 IC1212 92 IC1213 93 IC1214 94 IC1209 95 IC1210 98 IC1103 99 IC600 9A IC1201 9B IC1208

SECTION 11
BLOCK DIAGRAM



Explanation of Connectors

Note: Signal names which begin with asterisk (*) indicates that the corresponding signal is LOW when active.

CN1003 (MAIN) – (CIS)

Pin No.	Signal Name	Description
1	CIS IN 1	Contact Image Sensor Signal1
2	AGND	Analog Ground
3	+5V	+5V
4	-5V	-5V
5	CISSP1	Start Pulse1 for CIS
6	GND	Ground
7	CISCLK1	Clock1 for CIS
8	GND	Ground

CN1004 (MAIN) – (CIS)

Pin No.	Signal Name	Description
1	CIS IN2	Contact Image Sensor Signal2
2	AGND	Analog Ground
3	+5V	+5V
4	-5V	-5V
5	CISSP2	Start Pulse2 for CIS
6	GND	Ground
7	CISCLK2	Clock2 for CIS
8	GND	Ground
9	CIS SIZE DET1	CIS Size detect1
10	CIS SIZE DET2	CIS Size detect2

CN1005 (MAIN) – CN2001 (MOTHER)

Pin No.	Signal Name	Description
1	AGND	Analog Ground
2	AGND	Analog Ground
3	CCD EVEN	CCD EVEN Data
4	-5V	-5V
5	CCD ODD	CCD ODD Data
6	AGND	Analog Ground
7	CCDROG	CCD ROG
8	GND	Ground
9	CCDCLAMP	CCD Clamp
10	CCDS/H	CCD Sample Hold
11	GND	Ground
12	CCD RST	CCD RESET pulse
13	CCD P2	CCD DATA CLOCK 2
14	CCD P1	CCD DATA CLOCK 1
15	GND	Ground
16	CCD DET2	CCD Board detect 2
17	CCD DET1	CCD Board detect 1
18	LED (RD)	LED (Red)
19	LED (GR)	LED (Green)
20	+5VA	+5V (for Analog)
21	+5VD	+5V (for Digital)
22	RESERVE	
23	RESERVE	
24	RESERVE	
25	RESERVE	
26	TXD0	TXD0 for Pre Imprinter
27	RXD0	RXD0 for Pre Imprinter
28	RTS0	RTS0 for Pre Imprinter
29	CTS0	CTS0 for Pre Imprinter
30	*JBIGIRQ	JBIG interrupt request
31	*ACTTER	Active Terminator Enable
32	DA LD2	D/A Load 2
33	ANALOG GAIN2	GAIN Select Signal
34	ANALOG GAIN1	(Not Used)
35	ANALOG LD	Analog Control Signal Strobe
36	RESERVE	Start Pulse for Post Imprinter
37	+5VD	+5V (for Digital)
38	+5VD	+5V (for Digital)
39	PRE IMP SP	Start Pulse for Pre Imprinter D oor Sensor
40	BUZZER	Buzzer Pulse
41	TXD2	TXD2 for Video serial interface
42	RXD2	RXD2 for Video serial interface
43	RTS2	RTS2 for Video serial interface
44	CTS2	CTS2 for Video serial interface
45	AN0	Alternate output data bus0
46	AN1	Alternate output data bus1
47	AN2	Alternate output data bus2
48	AN3	Alternate output data bus3
49	AN4	Alternate output data bus4
50	AN5	Alternate output data bus5
51	GND	Ground
52	GND	Ground
53	E (LCD)	LCD Enable
54	R/W (LCD)	LCD Read/Write Enable
55	RS (LCD)	LCD Resistor Select
56	CLK40K	Clock output 40kHz
57	D/ALD	D/A Load
58	D/ACLK	D/A Clock
59	D/ADATA	D/A Data
60	RESET (IMP.)	Reset (for Imprint)
61	*CS	Chip Select for SCSI
62	*CS	Chip Selectfor JBIG
63	*IRQ3	TIARA Interrupt request
64	*CS6	Chip Select for TIARA
65	IRQ1	SCSI Interrupt request
66	*BUSEN	Bus Driver Enable
67	*CS CARRIGE	Chip Select for CARRIGE
68	*CS FEED	Chip Select for FEED
69	*CS CONVEYOR	Chip Select for CONVEYOR
70	*CS SIZE	Chip Select for SIZE
71	*CS KEY2	Chip Select for KEY2
72	*CS KEY1	Chip Select for KEY1
73	*CS PAPER	Chip Select for PAPER
74	*CS I/F BOARD	Chip Select for I/F BOARD
75	*RESET	Reset
76	*WAIT	CPU Wait
77	*CPUAS	CPU Address strobe
78	*CPUWR	CPU Write
79	*CPURD	CPU Read
80	GND	Ground
81	GND	Ground
82	CPUD15	CPU Data15
83	CPUD14	CPU Data14
84	CPUD13	CPU Data13
85	CPUD12	CPU Data12
86	CPUD11	CPU Data11
87	CPUD10	CPU Data10
88	CPUD9	CPU Data9
89	CPUD8	CPU Data8
90	+5VD	+5V (for Digital)
91	+5VD	+5V (for Digital)
92	CPUD7	CPU Data7
93	CPUD6	CPU Data6
94	CPUD5	CPU Data5
95	CPUD4	CPU Data4
96	CPUD3	CPU Data3
97	CPUD2	CPU Data2

CN1005 (MAIN) – CN2001 (MOTHER) (continued)

Pin No.	Signal Name	Description
98	CPUD1	CPU Data1
99	CPUD0	CPU Data0
100	GND	Ground
101	GND	Ground
102	CPUA8	CPU Address8
103	CPUA7	CPU Address7
104	CPUA6	CPU Address6
105	CPUA5	CPU Address5
106	CPUA4	CPU Address4
107	CPUA3	CPU Address3
108	CPUA2	CPU Address2
109	CPUA1	CPU Address1
110	CPUA0	CPU Address0
111	+5VD	+5V (for Digital)
112	+5VD	+5V (for Digital)
113	*FPAGE	Front Page Enable
114	*BPAGE	Back Page Enable
115	FWEN	Front Line Enable
116	BWEN	Back Line Enable
117	GND	Ground
118	WRSTB	Video Clock
119	GND	Ground
120	VD15	Video Data 15
121	VD14	Video Data 14
122	VD13	Video Data 13
123	VD12	Video Data 12
124	VD11	Video Data 11
125	VD10	Video Data 10
126	VD9	Video Data 9
127	VD8	Video Data 8
128	GND	Ground
129	VD7	Video Data 7
130	VD6	Video Data 6
131	VD5	Video Data 5
132	VD4	Video Data 4
133	VD3	Video Data 3
134	VD2	Video Data 2
135	VD1	Video Data 1
136	VD0	Video Data 0
137	+3VD	+3V
138	+3VD	+3V
139	GND	Ground
140	GND	Ground

CN603 (SCSI) – CN2002 (MOTHER)

Pin No.	Signal Name	Description
1	GND	Ground
2	GND	Ground
3	VD0	Video Data 0
4	VD1	Video Data 1
5	VD2	Video Data 2
6	VD3	Video Data 3
7	VD4	Video Data 4
8	VD5	Video Data 5
9	VD6	Video Data 6
10	VD7	Video Data 7
11	GND	Ground
12	VD8	Video Data 8
13	VD9	Video Data 9
14	VD10	Video Data 10
15	VD11	Video Data 11
16	VD12	Video Data 12
17	VD13	Video Data 13
18	VD14	Video Data 14
19	VD15	Video Data 15
20	GND	Ground

Pin No.	Signal Name	Description
21	WRSTB	Video Clock
22	GND	Ground
23	*BWEN	Back Line Enable
24	*FWEN	Front Line Enable
25	BPAGE	N.C.
26	FPAGE	N.C.
27	+5VD	+5V
28	CPUA0	CPU Address0
29	CPUA1	CPU Address1
30	CPUA2	CPU Address2
31	CPUA3	CPU Address3
32	CPUA4	CPU Address4
33	+5VD	+5V
34	CPUA5	CPU Address5
35	CPUA6	CPU Address6
36	CPUA7	CPU Address7
37	CPUA8	CPU Address7
38	GND	Ground
39	GND	Ground
40	CPUD0	CPU Data0
41	CPUD1	CPU Data1
42	CPUD2	CPU Data2
43	CPUD3	CPU Data3
44	+5VD	+5V
45	CPUD4	CPU Data4
46	CPUD5	CPU Data5
47	CPUD6	CPU Data6
48	CPUD7	CPU Data7
49	GND	Ground
50	CPUD8	CPU Data8
51	CPUD9	CPU Data9
52	CPUD10	CPU Data10
53	CPUD11	CPU Data11
54	+5VD	+5V
55	CPUD12	CPU Data12
56	CPUD13	CPU Data13
57	CPUD14	CPU Data14
58	CPUD15	CPU Data15
59	GND	Ground
60	*CPURD	CPU Read
61	*CPUWR	CPU Write
62	*CPUAS	CPU Address strobe
63	SCWAIT	CPU Wait from TIARA
64	GND	Ground
65	*RESET	Reset
66	GND	Ground
67	*SCSI IRQ	SCSI Input request
68	*TIARACS	Chip Select for TIARA
69	*TIAIRQ	TIARA input request
70	*JBIGCS	Chip Select for JBIG
71	*SCSICS	Chip Select for SCSI
72	*VERCS	Chip Select for VER
73	CTS2	(Not Used)
74	RTS2	(Not Used)
75	RXD2	(Not Used)
76	TXD2	(Not Used)
77	*ACTTER	Active Terminator Control
78	*JBIGIRQ	JBIG input request
79	GND	Ground
80	GND	Ground

CN351 (DRIVE) – Paper Feed Motor

Pin No.	Signal Name	Description
1	*FA	Feed Motor phase- A (–)
2	–	N.C.
3	FCOMA	24V for Feed Motor
4	FA	Feed Motor phase- A (+)

CN351 (DRIVE) – Paper Feed Motor (continued)

Pin No.	Signal Name	Description
5	*FB	Feed Motor phase- B (–)
6	FCOMB	24V for Feed Motor
7	FB	Feed Motor phase- B (+)

CN2003 (MOTHER) – CN331 (DRIVE)

Pin No.	Signal Name	Description
1	LD0	Local Data Bus 0
2	CS	CSFEED
3	CS	CSCAR
4	SKEW	SKEW
5	D/A DATA	DAC DATA
6	D/A CLK	DAC CLK
7	D/A LD	DAC LD2
8	+38V	+38V
9	VCC	+5VD
10	GND	Ground
11	GND	Ground
12	GND	Ground
13	GND	Ground
14	GND	Ground
15	+24V	+24V
16	+24V	+24V
17	LD1	Local Data Bus 1
18	RESET	Reset
19	LD2	Local Data Bus 2
20	LD3	Local Data Bus 3
21	CS	CSCONV
22	LD4	Local Data Bus 4
23	LD5	Local Data Bus 5
24	LD6	Local Data Bus 6
25	LD7	Local Data Bus 7
26	VCC	+5VD
27	LAMP2 SWITCH	LAMP SW2
28	LAMP1 SWITCH	LAMP SW1
29	GND	Ground
30	DOOR2 SWITCH	LAMP SW2
31	DOOR1 SWITCH	LAMP SW1
32	+24V	+24V

CN341 (DRIVE) – Conveyor Motor

Pin No.	Signal Name	Description
1	*CA	Conveyor Motor Phase-A (–)
2	CCOMA	+24V for Conveyor Motor
3	CA	Conveyor Motor Phase-A (+)
4	*CB	Conveyor Motor Phase-B (–)
5	CCOMB	24V for Conveyor Motor
6	CB	Conveyor Motor Phase-B (+)

CN361 (DRIVE) – CARRIAGE MOTOR

Pin No.	Signal Name	Description
1	*RA	Carriage Motor Phase-A (–)
2	–	N.C.
3	RCOMA	24V for Carriage Motor
4	RA	Carriage Motor Phase-A (+)
5	*RB	Carriage Motor Phase-B (–)
6	RCOMB	24V for Carriage Motor
7	RB	Carriage Motor Phase-B (+)
8	–	N.C.

CN332 (DRIVE) – 24V INTERLOCK SWITCH

Pin No.	Signal Name	Description
1	+24V3	ADF Switch for +24V
2	+24V2	ADF Conveyor Switch for +24V
3	+24V2	ADF Conveyor Switch for +24V
4	+24V1	+24V

CN372 (DRIVE) – (CIS)

Pin No.	Signal Name	Description
1	–	N.C.
2	GREEN	Green
3	GND	Ground
4	Red	Red
5	–	N.C.

CN801 (POWER) – Power Switch

Pin No.	Signal Name	Description
1	NEUTRAL	Neutral
2	–	N.C.
3	LIVE	Live

CN871 (POWER) – Fan

Pin No.	Signal Name	Description
1	+24V0VP	+24V
2	–	N.C.
3	FAN	Fan

Power Switch – A/C Inlet

Pin No.	Signal Name	Description
1	NEUTRAL	Neutral
2	–	N.C.
3	LIVE	Live

CN2007 (MOTHER) – CN536 (PANEL)

Pin No.	Signal Name	Description
1	LD 0	L-Data 0
2	LD 1	L-Data 1
3	LD 2	L-Data 2
4	LD 3	L-Data 3
5	LD 4	L-Data 4
6	LD 5	L-Data 5
7	LD 6	L-Data 6
8	LD 7	L-Data 7
9	+5VS	+5V
10	+5VS	+5V
11	+12VS	+12V
12	LCD RS	LCD Resistor Select
13	LCD R W	LCD Read/Write Enable
14	LCD E	LCD Enable
15	BUZZER	Buzzer Pulse
16	KEY1	KEY1 Enable
17	KEY2	KEY2 Enable
18	LEDGR	LED (Green)
19	LEDRD	LED (Red)
20	GND	Ground
21	GND	Ground
22	GND	Ground

CN2010 (MOTHER) – CN501 (RELAY [BACK])

Pin No.	Signal Name	Description
1	CTS0	CTS0 for Pre Imprinter
2	TXD0	TXD0 for Pre Imprinter
3	RTS0	RTS0 for Pre Imprinter
4	RXD0	RXD0 for Pre Imprinter
5	IMP RST	Imprinter Reset
6	PREIMPSP	Start Pulse for Post imprinter Door Sensor
7	+5V	+5V
8	38V	38V
9	38V	38V
10	+12V	+12V
11	GND	Ground
12	GND	Ground
13	CLK40K	Clock output 40kHz
14	+5V	+5V
15	DFGAIN	
16	+24V	+24V
17	GND	Ground
18	SIZE 0	Paper Size Sensor 0
19	SIZE 1	Paper Size Sensor 1
20	SIZE 2	Paper Size Sensor 2
21	SIZE 3	Paper Size Sensor 3
22	SIZE 4	Paper Size Sensor 4
23	SIZE 5	Paper Size Sensor 5
24	SIZE 6	Paper Size Sensor 6
25	SIZE 7	Paper Size Sensor 7
26	SIZE 8	Paper Size Sensor 8
27	DOOR IMP	Imprinter Door Status
28	+5V	+5V

CN2009(MOTHER) – CN504 (RELAY [BACK])

Pin No.	Signal Name	Description
1	GND	Ground
2	GND	Ground
3	–	N.C.
4	START LED	Starting LED
5	RETARD	Retard
6	FB DOOR	Flat Bed Door Status
7	END LED	Ending LED
8	END POS	Ending Position
9	HOPP MID	Hopper MID
10	HOPP POS	Hopper Position
11	PAPER RF	LED Current Control
12	PAPER	Paper
13	START POS	Paper Position
14	DBL FEED	Double Feed
15	+12V	+12V
16	SIZE 0	Paper Size LED 0
17	SIZE 1	Paper Size LED 1
18	SIZE 2	Paper Size LED 2
19	SIZE 3	Paper Size LED 3
20	SIZE 4	Paper Size LED 4
21	SIZE 5	Paper Size LED 5
22	SIZE 6	Paper Size LED 6
23	SIZE 7	Paper Size LED 7
24	SIZE 8	Paper Size LED 8
25	+5V	+5V
26	+5V	+5V

CN2011 (MOTHER) – CN516(CARRIAGE HOME DETECTOR)

Pin No.	Signal Name	Description
1	GND	Ground
2	CARRIAGE	Carriage
3	–	N.C.
4	VCC	+5V

CN2008 (MOTHER) – CN001(CCD Board)

Pin No.	Signal Name	Description
1	+24V	+24V
2	+24V	+24V
3	GND	Ground
4	GND	Ground
5	LAMP SW1	LAMP SW 1
6	LAMP SW2	LAMP SW 2
7	CCDDET2	CCD Board detect 2
8	AGND	Analog Ground
9	AGND	Analog Ground
10	CCD ODD	CCD ODD DATA
11	AGND	Analog Ground
12	CCD EVEN	CCD EVEN DATA
13	GND	Ground
14	CCDDET1	CCD Board detect 1
15	VCC	+5V
16	DAC DATA	DAC Data
17	DAC CLK	DAC Clock
18	CCD CLMP	CCD Clamp
19	ANLG LD	Analog Control Signal Strobe
20	GAIN2	GAIN 2
21	GAIN1	GAIN1
22	GND	Ground
23	CCD ROG	CCD ROG
24	CCD P1	CCD DATA Clock 1
25	CCD P2	CCD DATA Clock 2
26	GND	Ground
27	GND	Ground
28	CCD RST	CCD RESET pulse
29	GND	Ground
30	CCD SH	CCD Sample Hold
31	GND	Ground
32	GND	Ground
33	-5V	-5V
34	+12V	+12V

CN503 (RELAY (BACK)) – Imprinter (Option)

Pin No.	Signal Name	Description
1	CTS0	TXD0 for Imprinter serial interface
2	TXD0	RXD0 for Imprinter serial interface
3	RTS0	RTS0 for Imprinter serial interface
4	RXD0	CTS0 for Imprinter serial interface
5	IMP RST	Imprinter Reset
6	SP	Start Signal
7	VCC	+5V
8	+38V	+38V
9	+38V	+38V
10	+12VS	+12V
11	GND	Ground
12	GND	Ground

CN2004 (MOTHER) – CN851 (POWER)

Pin No.	Signal Name	Description
1	+5V	+5V
2	+5V	+5V
3	GND	Ground
4	GND	Ground
5	+3.3VD	+3.3V
6	+12V OVP	+12V
7	+5VA	+5V
8	AGND	Analog Ground
9	–5V	–5V

CN2005 (MOTHER) – CN843 (POWER)

Pin No.	Signal Name	Description
1	+24V	+24V
2	+24V	+24V
3	GND	Ground
4	GND	Ground

CN002 (CCD Board) – LAMP DRIVE

Pin No.	Signal Name	Description
1	GND	Ground
2	LAMP1	Lamp Control 1
3	GND	Ground
4	24V	+24V

CN529 (HOPPER HOME SENSOR) – CN537 (DOCUMENT DETECTOR)

Pin No.	Signal Name	Description
1	GND	Ground
2	PAPER	Paper
3	FG	Flame Ground
4	+5V	+5V

CN526 (ENDING POSITION LED) – CN527 (DOCUMENT COVER SENSOR)

Pin No.	Signal Name	Description
1	GND	Ground
2	FB DOOR	FB DOOR status
3	+5V	+5V
4	+5V	+5V

CN531 (ENDING POSITION SENSOR) – CN530 (HOPPER HOME SENSOR)

Pin No.	Signal Name	Description
1	GND	Ground
2	GND	Ground
3	HOPP POS	Hopper Position
4	PAPER	Paper
5	+5V	+5V
6	+5V	+5V
7	–	N.C.

CN513 (RELAY [BACK]) – CN525 (ENDING POSITION LED)

Pin No.	Signal Name	Description
1	GND	Ground
2	GND	Ground
3	FB DOOR	Flat-Bed Door Sig.
4	END LED	Ending LED
5	+5V	+5V
6	+5V	+5V

CN522 (RELAY [BACK]) – CN521 (SIZE SENSOR)

Pin No.	Signal Name	Description
1	GND	Ground
2	GND	Ground
3	–	N.C.
4	–	N.C.
5	–	N.C.
6	SIZE 0	Paper Size Sensor 0
7	SIZE 1	Paper Size Sensor 1
8	SIZE 2	Paper Size Sensor 2
9	SIZE 3	Paper Size Sensor 3
10	SIZE 4	Paper Size Sensor 4
11	SIZE 5	Paper Size Sensor 5
12	SIZE 6	Paper Size Sensor 6
13	SIZE 7	Paper Size Sensor 7
14	SIZE 8	Paper Size Sensor 8
15	+5V	+5V
16	+5V	+5V

CN502 (RELAY [BACK]) – CN534 (DOUBLE FEED DETECTOR (G))

Pin No.	Signal Name	Description
1	+24V	+24V
2	+24V	+24V
3	+5V	+5V
4	–	N.C.
5	DFGAIN	Double-Feed Gain Sig.
6	CLK40K	Clock Output 40kHz
7	GND	Ground
8	GND	Ground

CN515 (RELAY [BACK]) – CN518 (STARTING POSITION LED)

Pin No.	Signal Name	Description
1	START LED	Starting LED
2	–	N.C.
3	–	N.C.
4	–	N.C.
5	+5V	+5V

CN505 (RELAY [BACK]) – CN509 (RELAY [SIDE])

Pin No.	Signal Name	Description
1	GND	Ground
2	GND	Ground
3	GND	Ground
4	–	N.C.
5	RETARD	Retard
6	END POS	Ending Position
7	HOPP MID	Hopper MID
8	HOPP POS	Hopper POS
9	PAPER RF	LED Current Control
10	PAPER	Paper
11	START POS	Paper Position
12	DBL FEED	Double Feed
13	+12V	+12V
14	SIZE LED 0	Paper Size LED 0
15	SIZE LED 1	Paper Size LED 1
16	SIZE LED 2	Paper Size LED 2
17	SIZE LED 3	Paper Size LED 3
18	SIZE LED 4	Paper Size LED 4
19	SIZE LED 5	Paper Size LED 5
20	SIZE LED 6	Paper Size LED 6
21	SIZE LED 7	Paper Size LED 7
22	SIZE LED 8	Paper Size LED 8
23	+5V	+5V
24	+5V	+5V

CN511 (RELAY [SIDE]) – CN520 (STARTING POSITION SENSOR)

Pin No.	Signal Name	Description
1	GND	Ground
2	GND	Ground
3	START POS	Starting Position
4	DBL FEED	Double Feed
5	+12V	+12V
6	+5V	+5V
7	+5V	+5V

CN510 (RELAY [SIDE]) – CN524 (SIZE LED)

Pin No.	Signal Name	Description
1	SIZE LED 2	Paper Size LED 2
2	SIZE LED 0	Paper Size LED [illegible]
3	SIZE LED 4	Paper Size LED 4
4	SIZE LED 1	Paper Size LED 1
5	SIZE LED 6	Paper Size LED 6
6	SIZE LED 3	Paper Size LED 3
7	SIZE LED 8	Paper Size LED 8
8	SIZE LED 5	Paper Size LED 5
9	+5V	+5V
10	SIZE LED 7	Paper Size LED 7

CN514 (RELAY [SIDE]) – CN517 (RETARD POSITION DETECTOR)

Pin No.	Signal Name	Description
1	GND	Ground
2	GND	Ground
3	RETARD	Retard
4	+5V	+5V
5	+5V	+5V

CN512 (RELAY [SIDE]) – CN532 (RETARD POSITION DETECTOR)

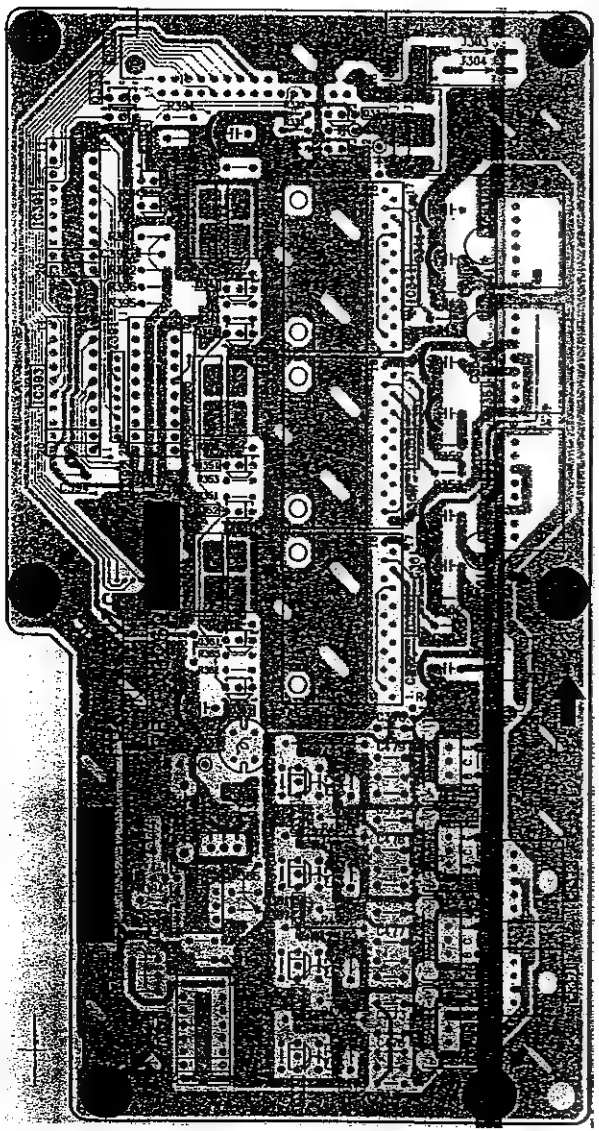
Pin No.	Signal Name	Description
1	GND	Ground
2	GND	Ground
3	END POS	Ending Position
4	HOPP POS	Hopper Position
5	PAPER RF	LED Current Control
6	PAPER	Paper
7	+5V	+5V
8	+5V	+5V

CN538 (DOCUMENT DETECTOR) – DOCUMENT DETECTED SENSOR

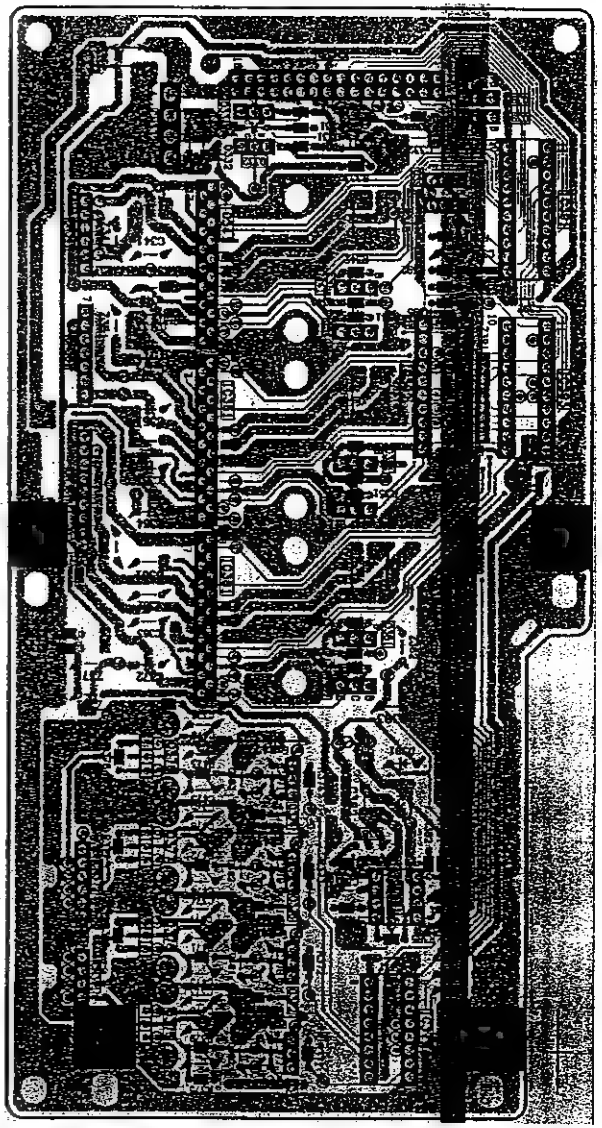
Pin No.	Signal Name	Description
1	GND	Ground
2	Paper	Paper
3	FG	Flame Ground
4	+5V	+5V

SECTION 12
CIRCUIT BOARDS

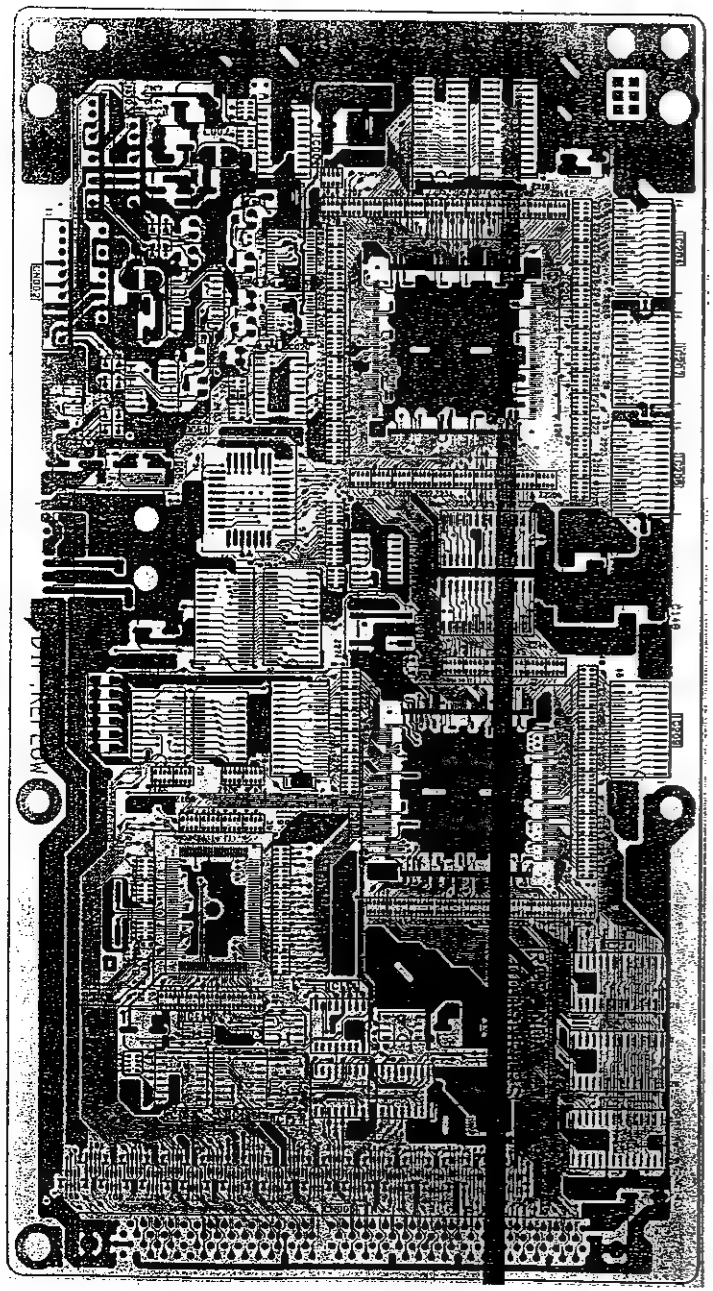
DRIVE Board (Component Side)



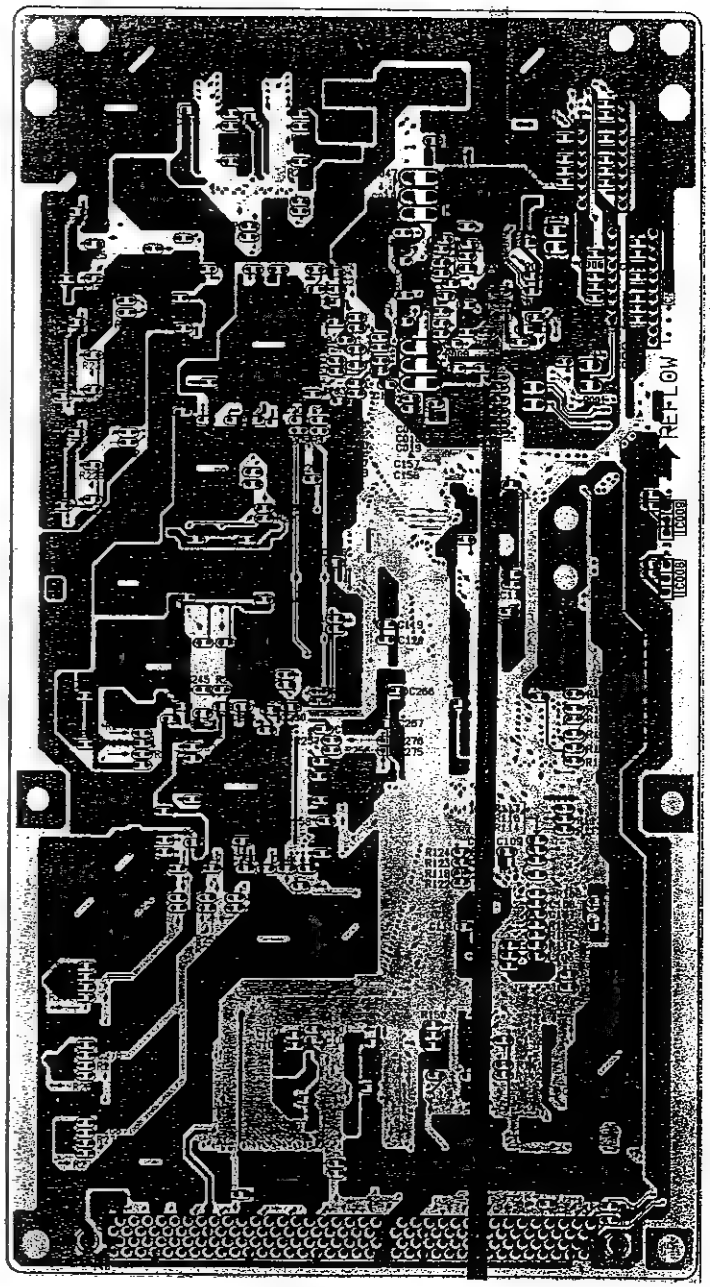
DRIVE Board (Solder Side)



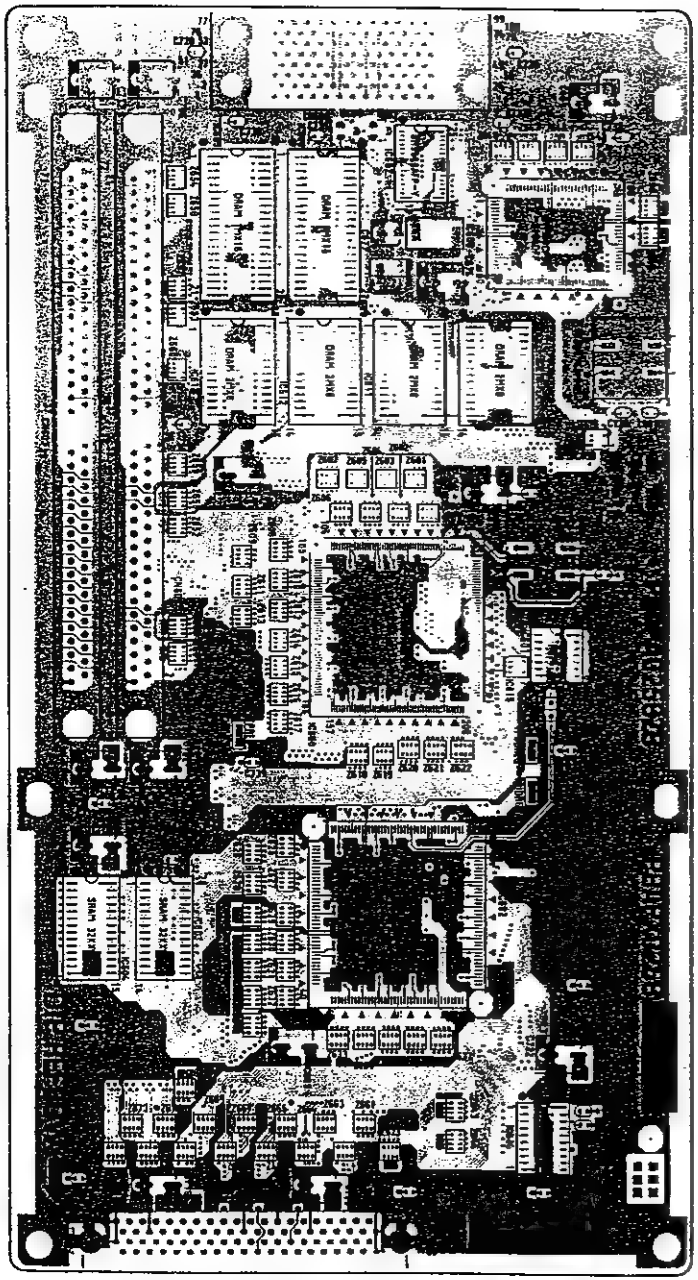
MAIN CONTROL Board (Component Side)



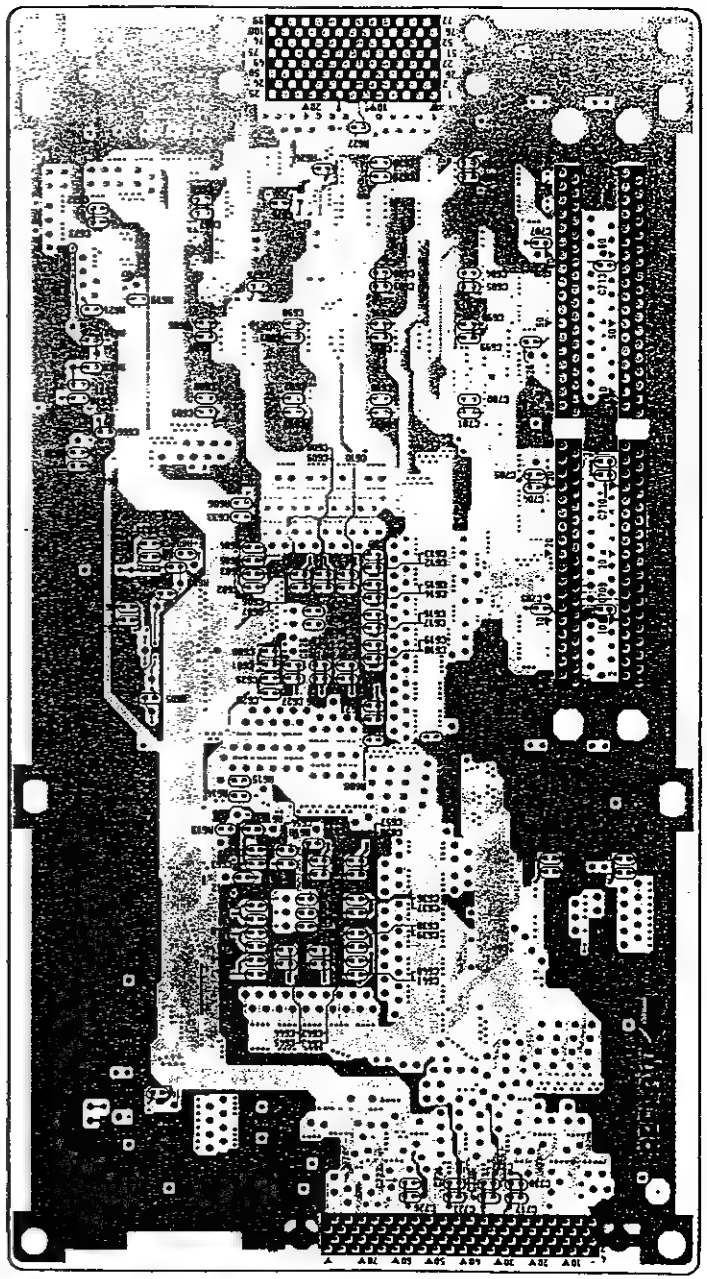
MAIN CONTROL Board (Solder Side)



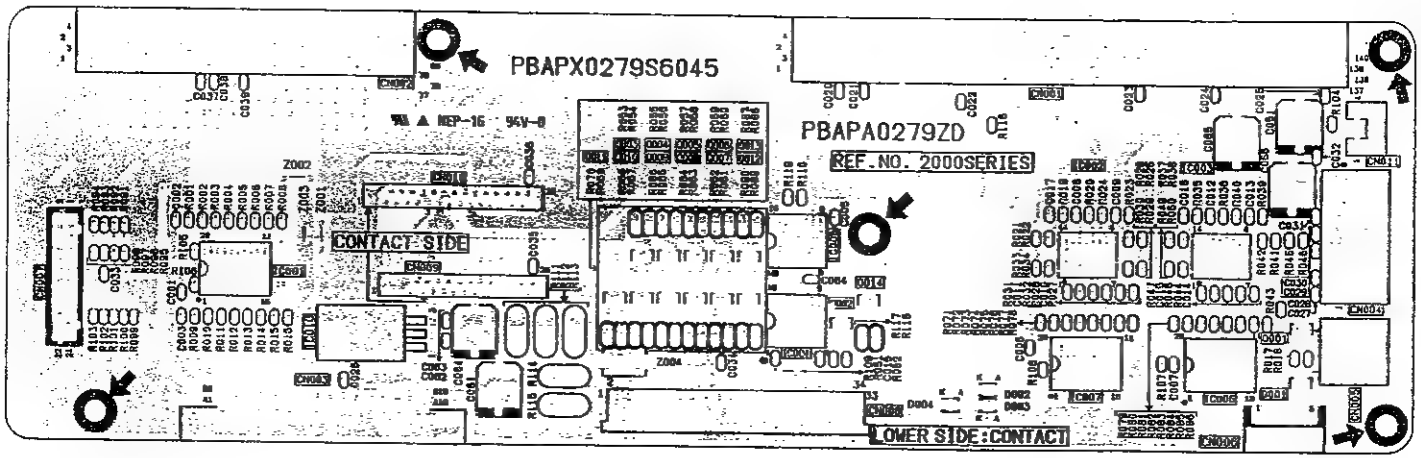
SCSI Board (Component Side)



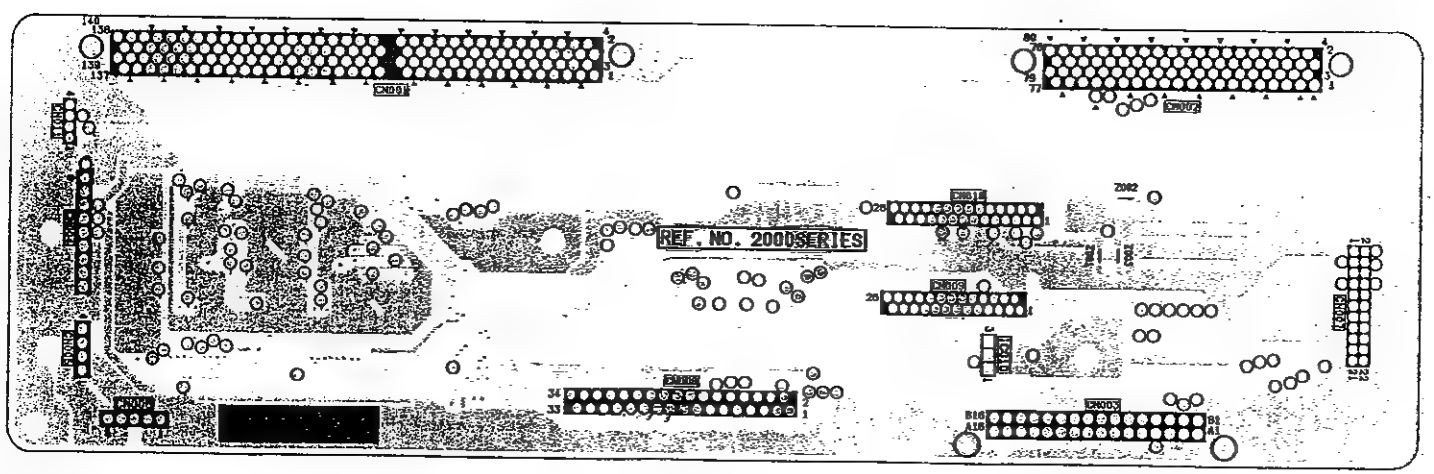
SCSI Board (Solder Side)



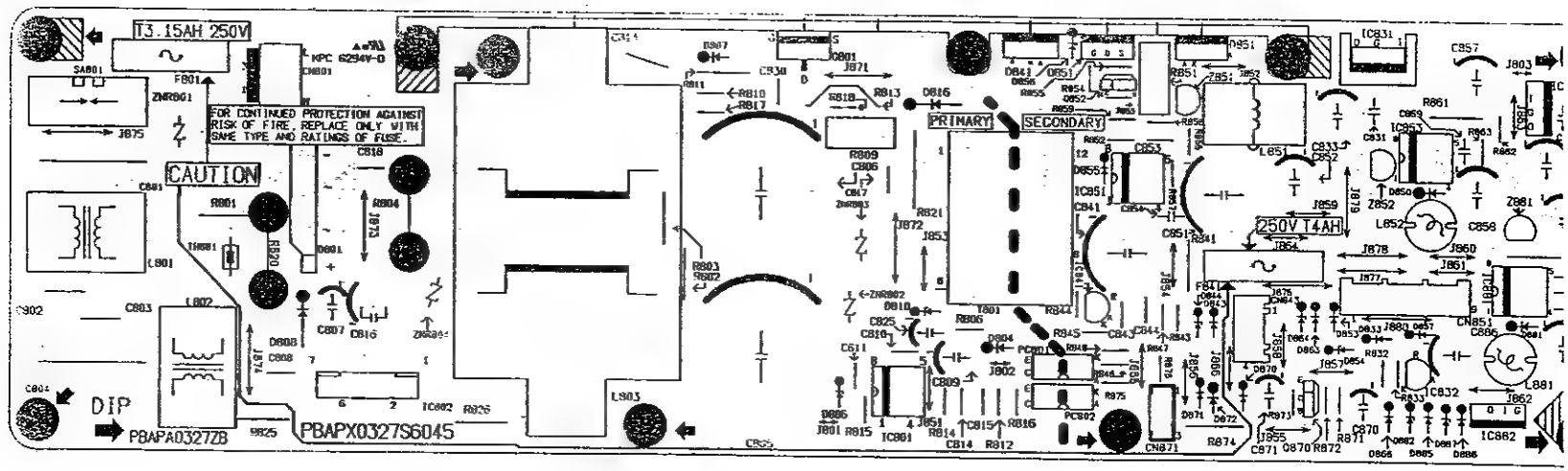
MOTHER Board (Component Side)



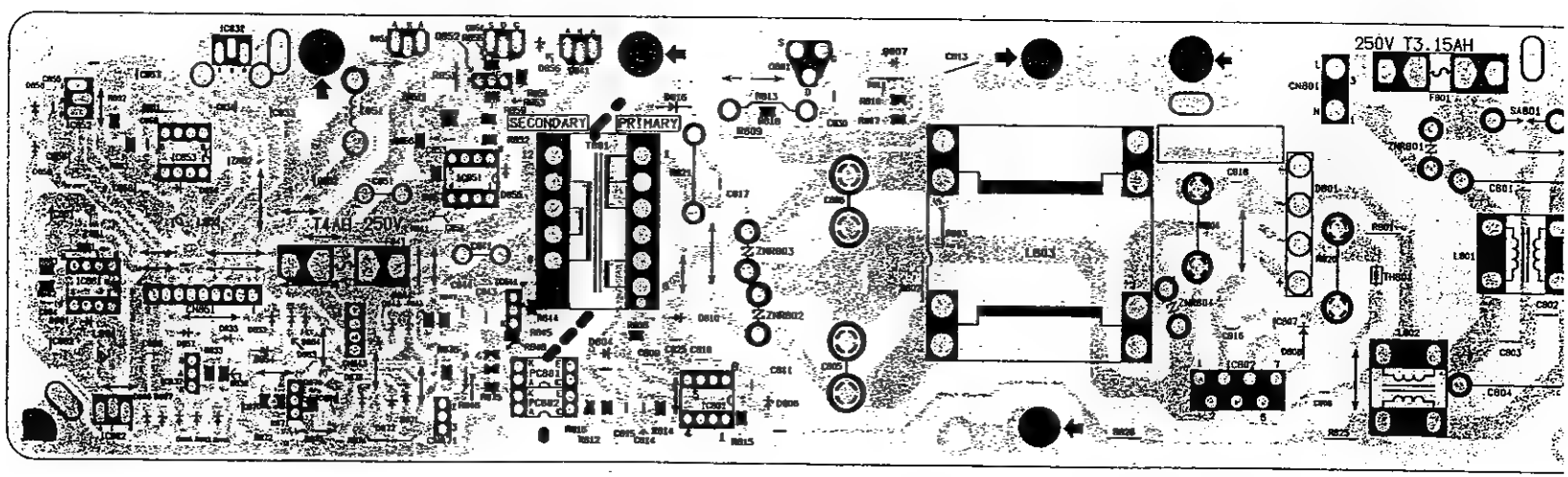
MOTHER Board (Solder Side)



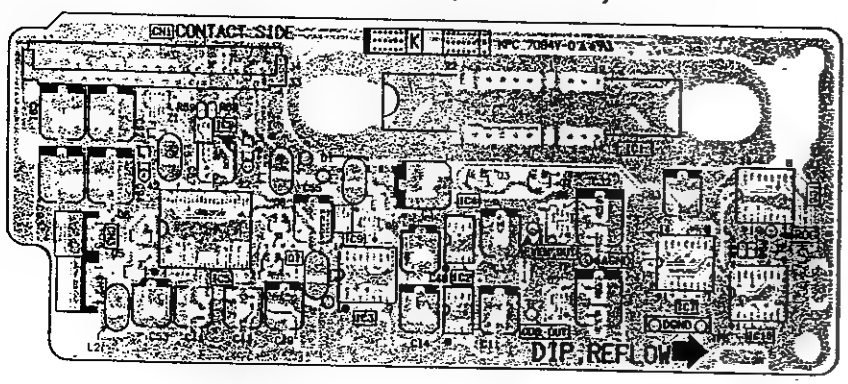
POWER Board (Component Side)



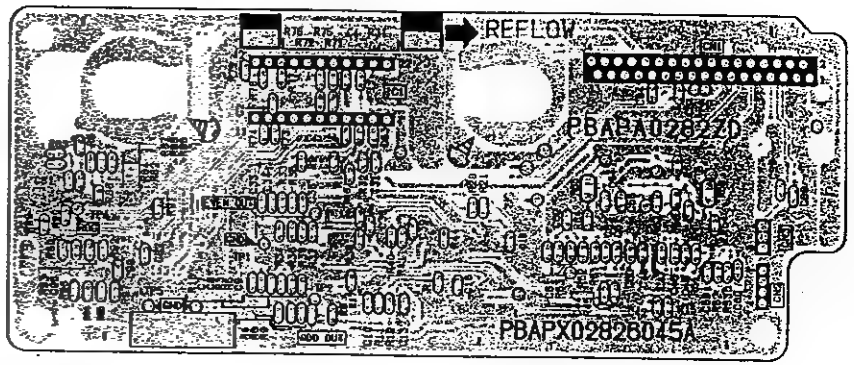
POWER Board (Solder Side)



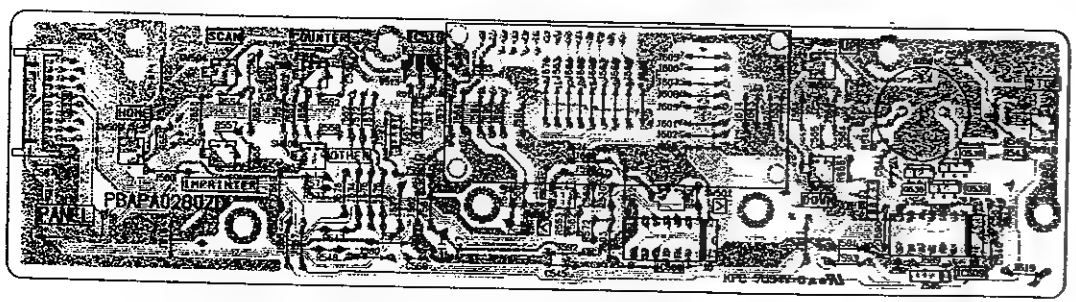
CCD Board (Component Side)



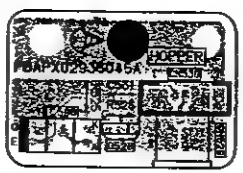
CCD Board (Solder Side)



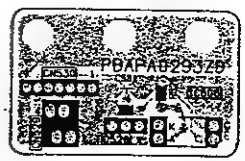
PANEL Board (Component Side)



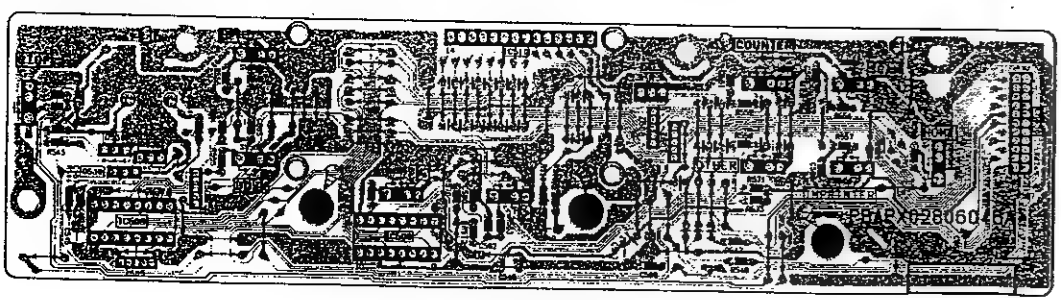
HOPPER HOME SENSOR Board
(Component Side)



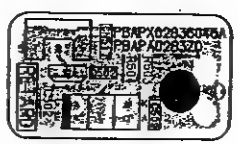
HOPPER HOME SENSOR Board
(Solder Side)



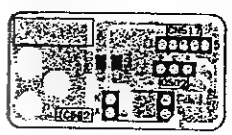
PANEL Board (Solder Side)



RETARD POSITION
DETECTOR Board
(Component Side)

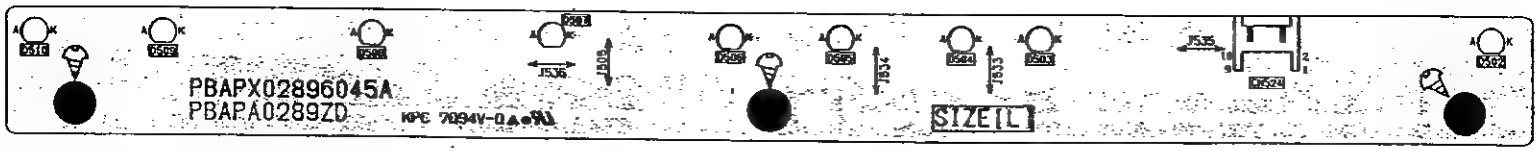


RETARD POSITION
DETECTOR Board
(Solder Side)



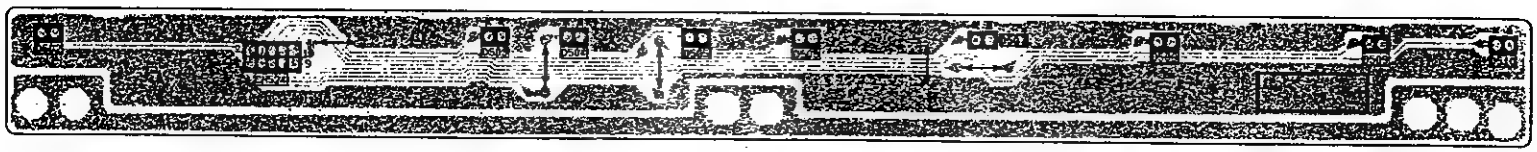
SIZE LED Board (Component Side)

(29)



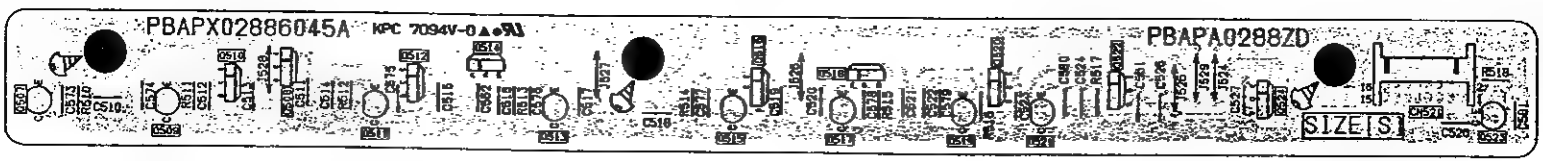
SIZE LED Board (Solder Side)

(30)



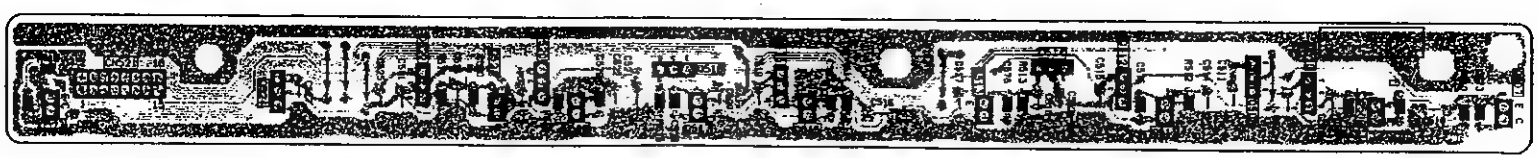
SIZE SENSOR Board (Component Side)

(31)

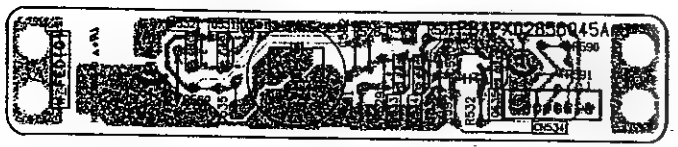


SIZE SENSOR Board (Solder Side)

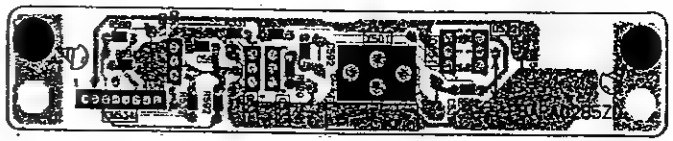
(32)



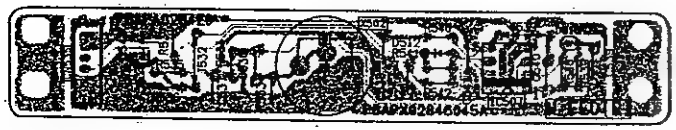
DOUBLE FEED DETECTOR (G) Board (Component Side)



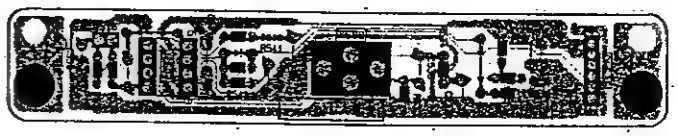
DOUBLE FEED DETECTOR (G) Board (Solder Side)



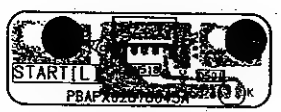
DOUBLE FEED DETECTOR (R) Board (Component Side)



DOUBLE FEED DETECTOR (R) Board (Solder Side)

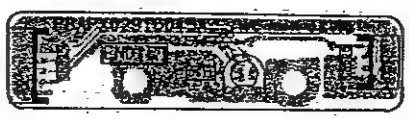


STARTING POSITION LED Board (Component Side)

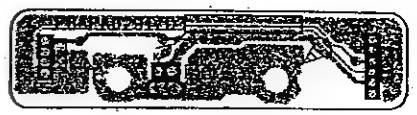


STARTING POSITION LED Board (Solder Side)

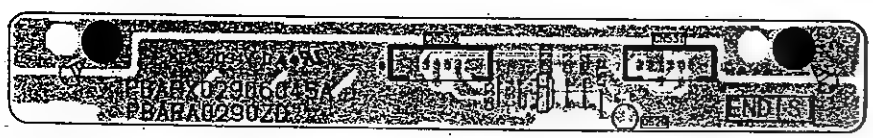
ENDING LED Board (Component Side)



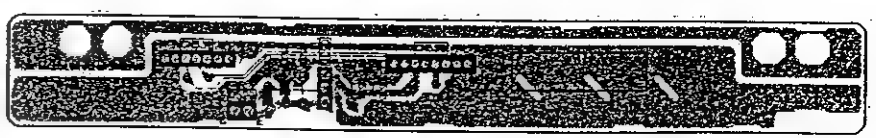
ENDING LED Board (Solder Side)



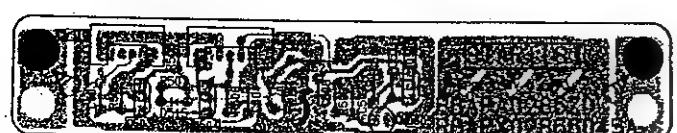
STARTING POSITION SENSOR Board (Component Side)



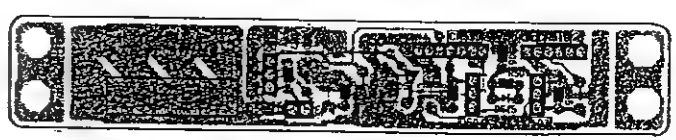
STARTING POSITION SENSOR Board (Solder Side)



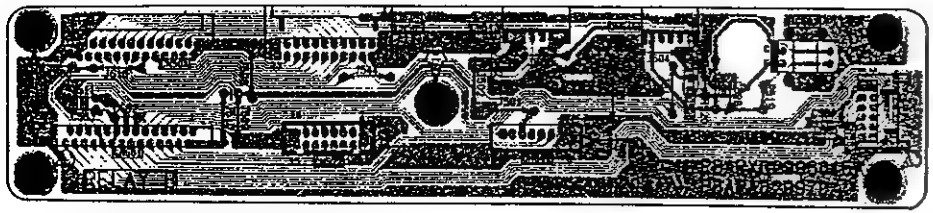
ENDING POSITION SENSOR Board (Component Side)



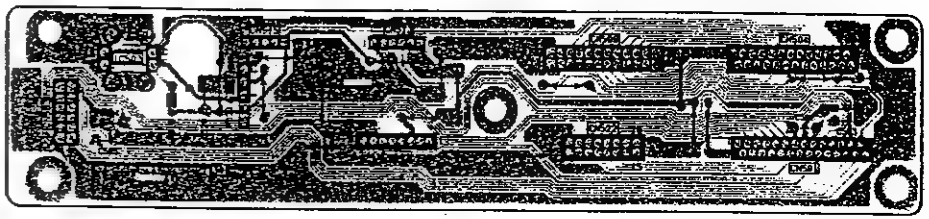
ENDING POSITION SENSOR Board (Solder Side)



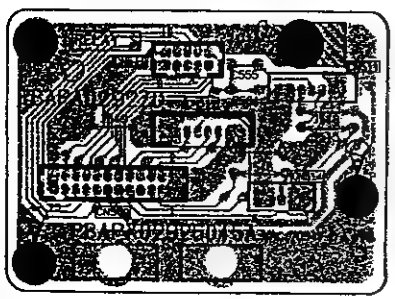
RELAY (BACK) Board (Component Side)



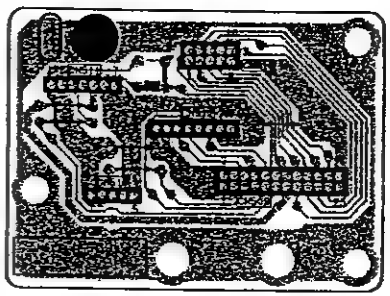
RELAY (BACK) Board (Solder Side)



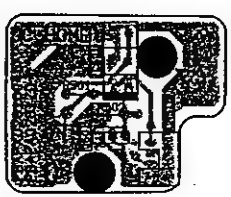
RELAY (SIDE) Board (Component Side)



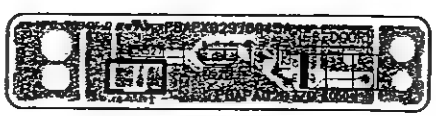
RELAY (SIDE) Board (Solder Side)



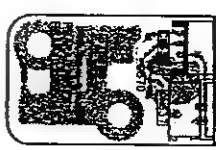
CARRIAGE HOME DETECTOR Board
(Component Side)



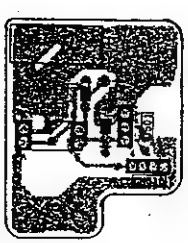
DOCUMENT COVER SENSOR Board
(Component Side)



DOCUMENT DETECTOR Board
(Component Side)

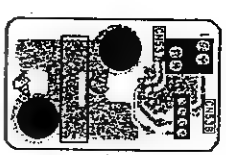


CARRIAGE HOME DETECTOR Board
(Solder Side)



DOCUMENT COVER SENSOR Board
(Solder Side)

DOCUMENT DETECTOR Board
(Solder Side)



SECTION 13
SCHEMATIC DIAGRAM

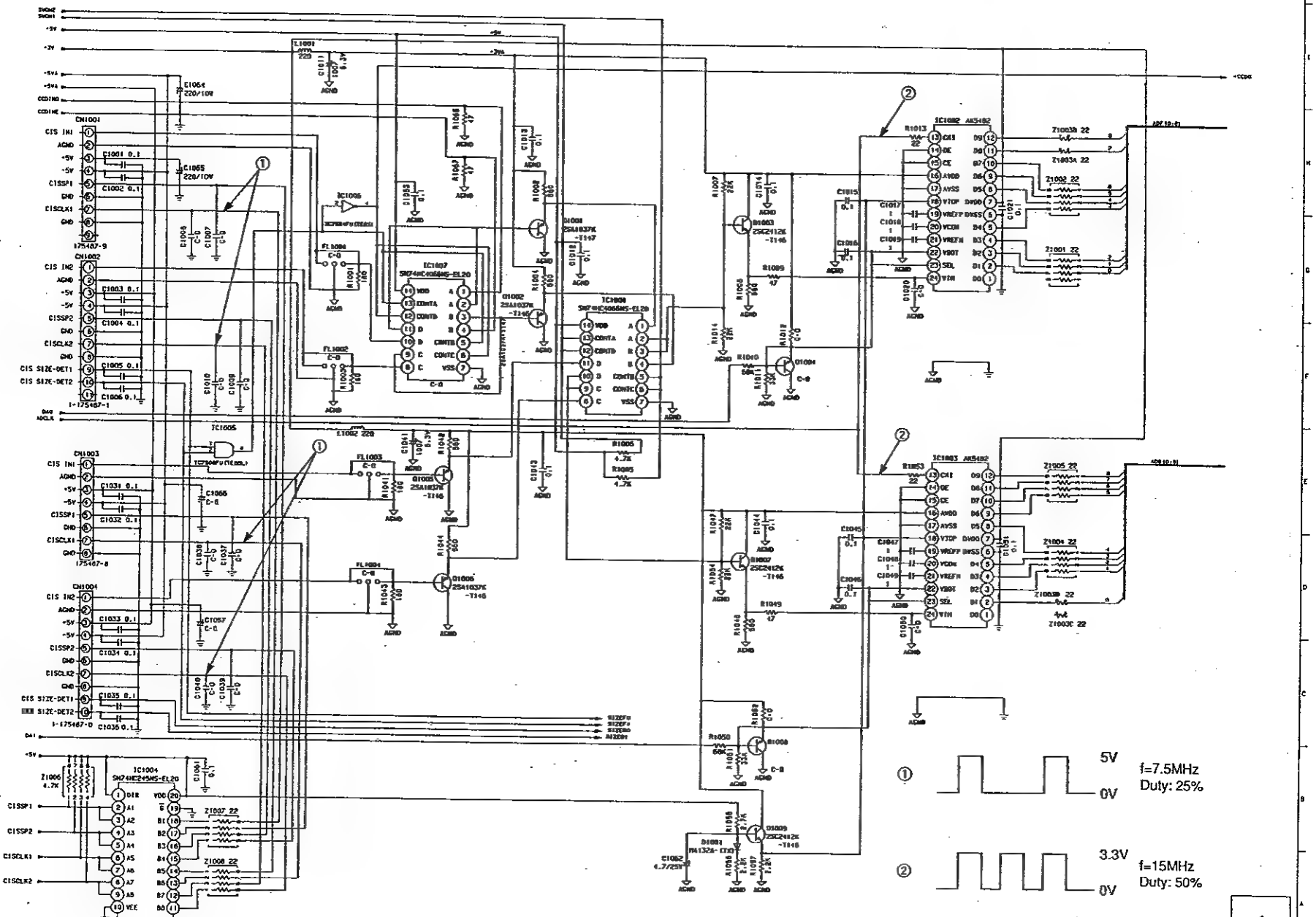
IMPORTANT SAFETY NOTICE

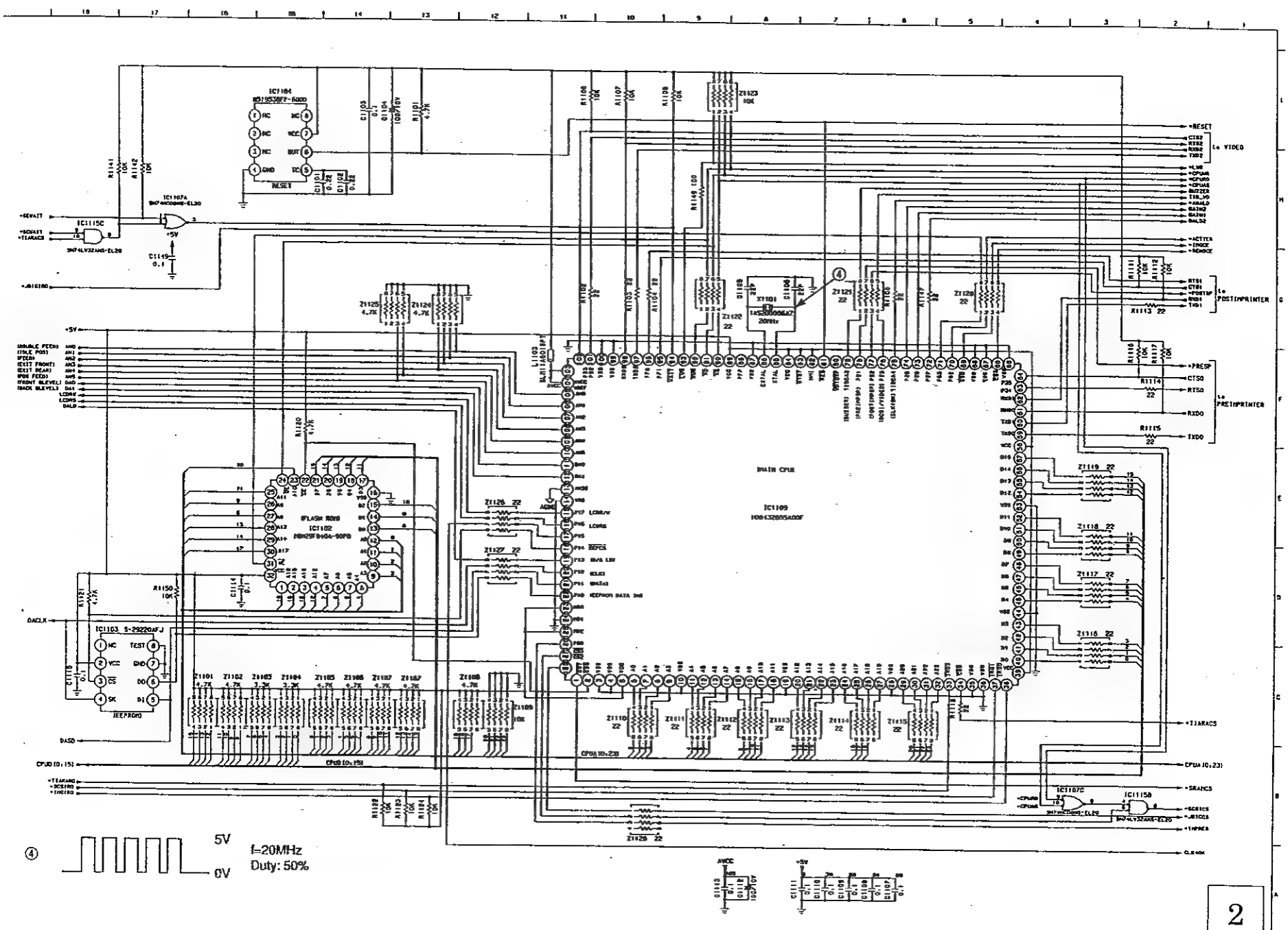
THE SHADED AREA ON THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM FIRE AND ELECTRICAL SHOCK HAZARDS. WHEN SERVICING, IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SHADED AREAS OF THIS SCHEMATIC.

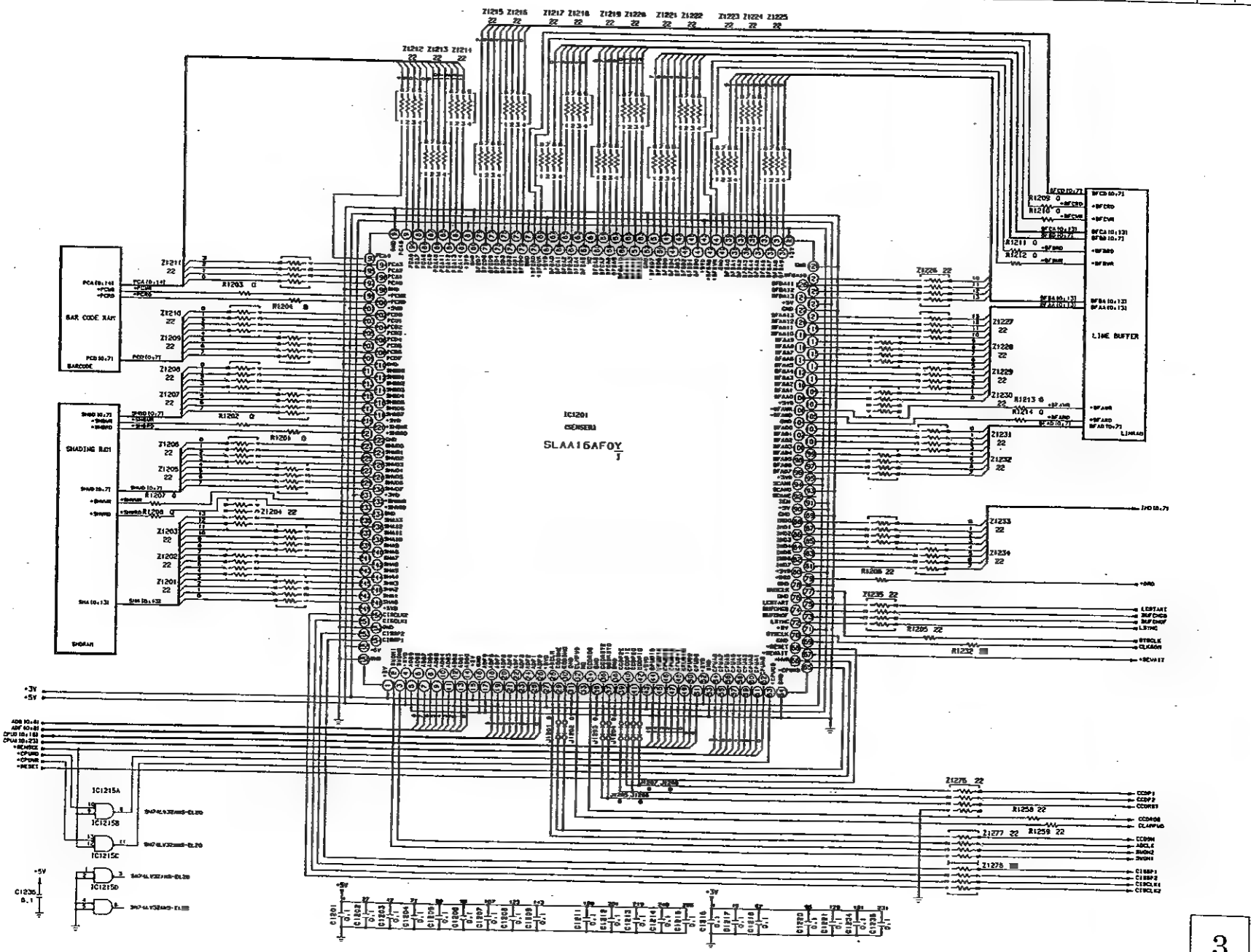
13.1 MAIN CONTROL Board ..... 1 to 13
13.2 SCSI Board ..... 14 to 18
13.3 DRIVE Board ..... 19 to 25
13.4 POWER Board ..... 26 to 27
13.5 MOTHER Board ..... 28 to 29
13.6 PANEL Board 30
13.7 CCD Board 31
13.8 RELAY (BACK) Board 32
13.9 RELAY (SIDE)Board 33

Note: This Schematic Diagram is the latest at the time of printing and subject to change without notice.

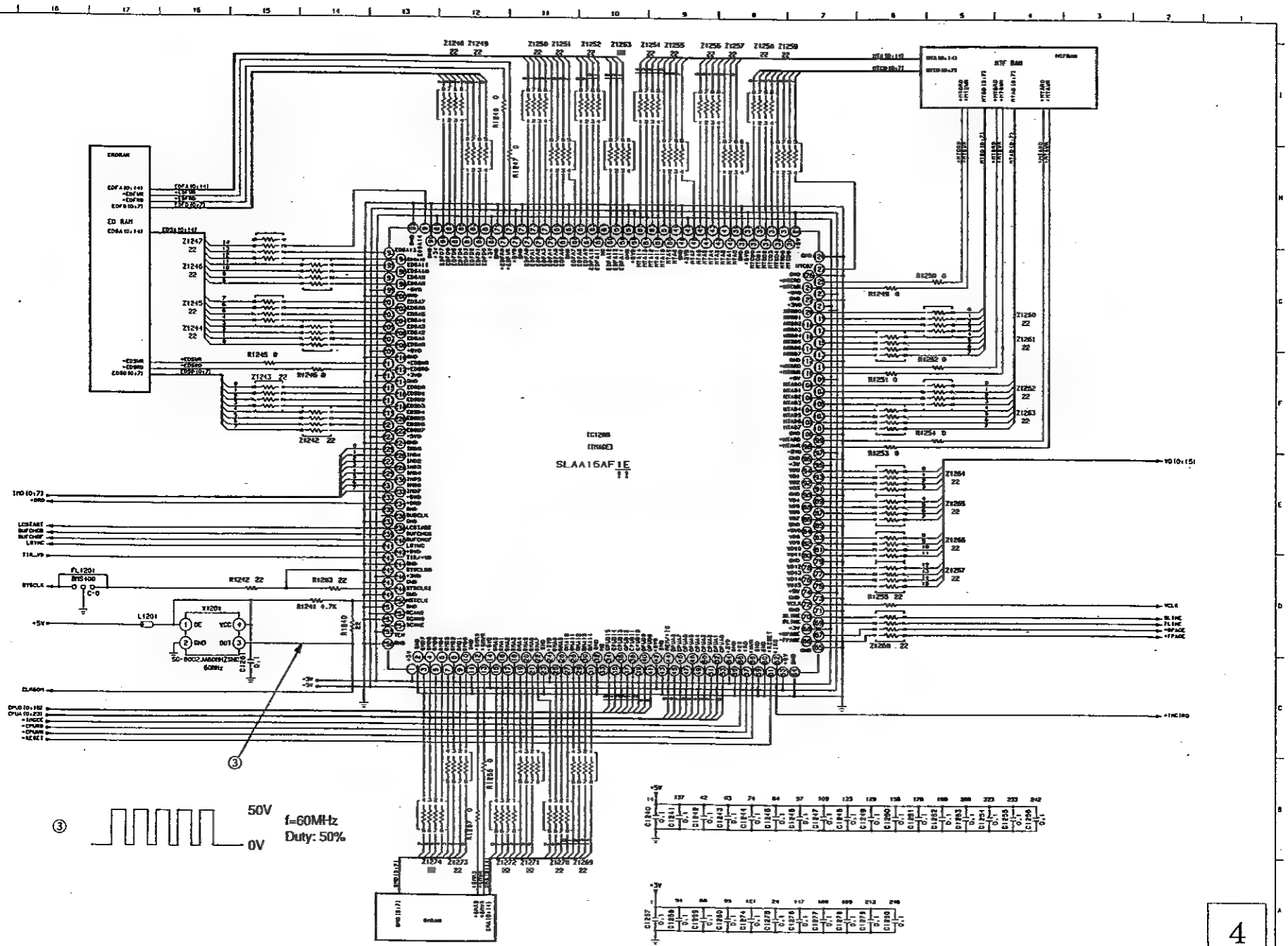
13.1 MAIN CONTROL Board

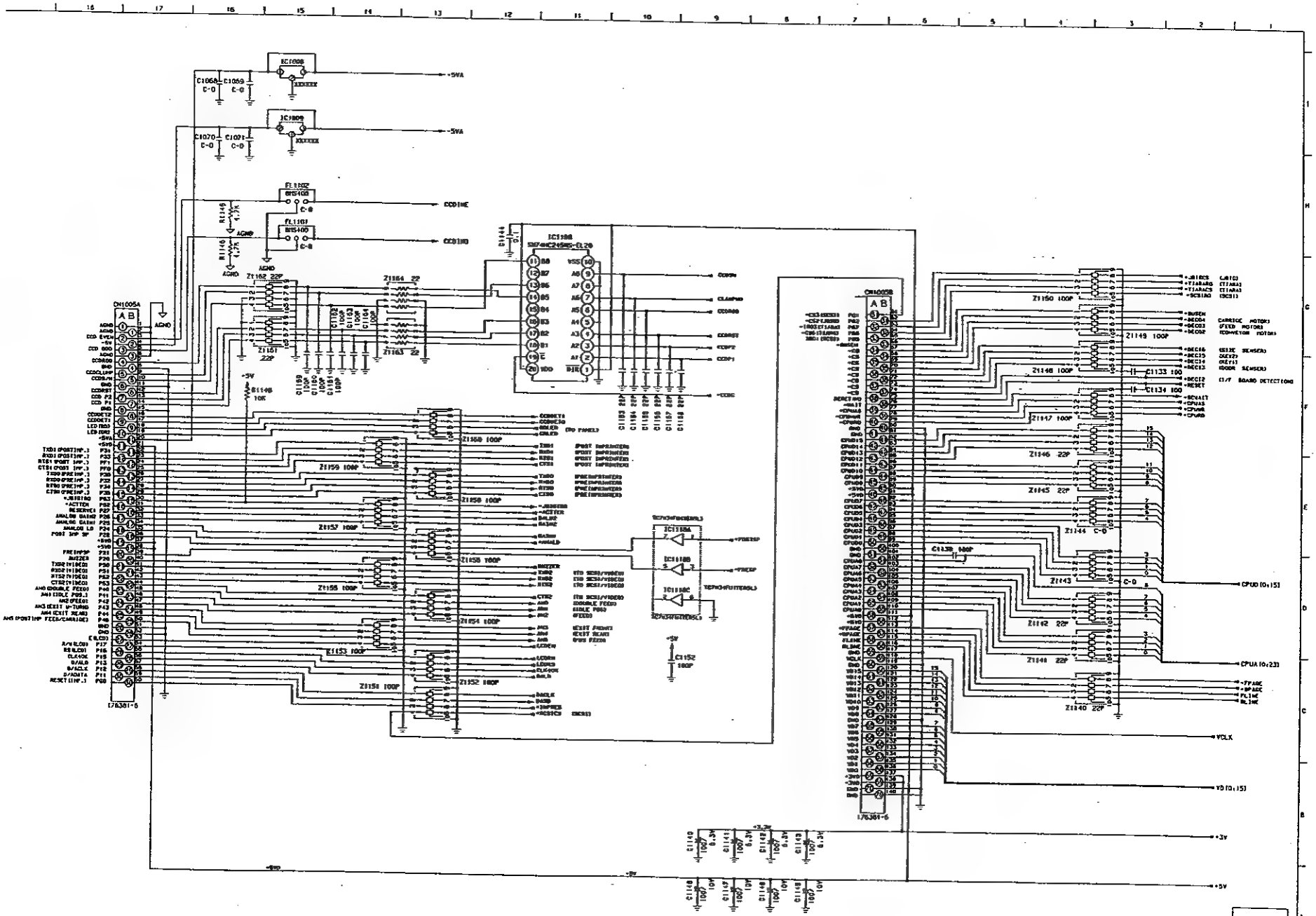


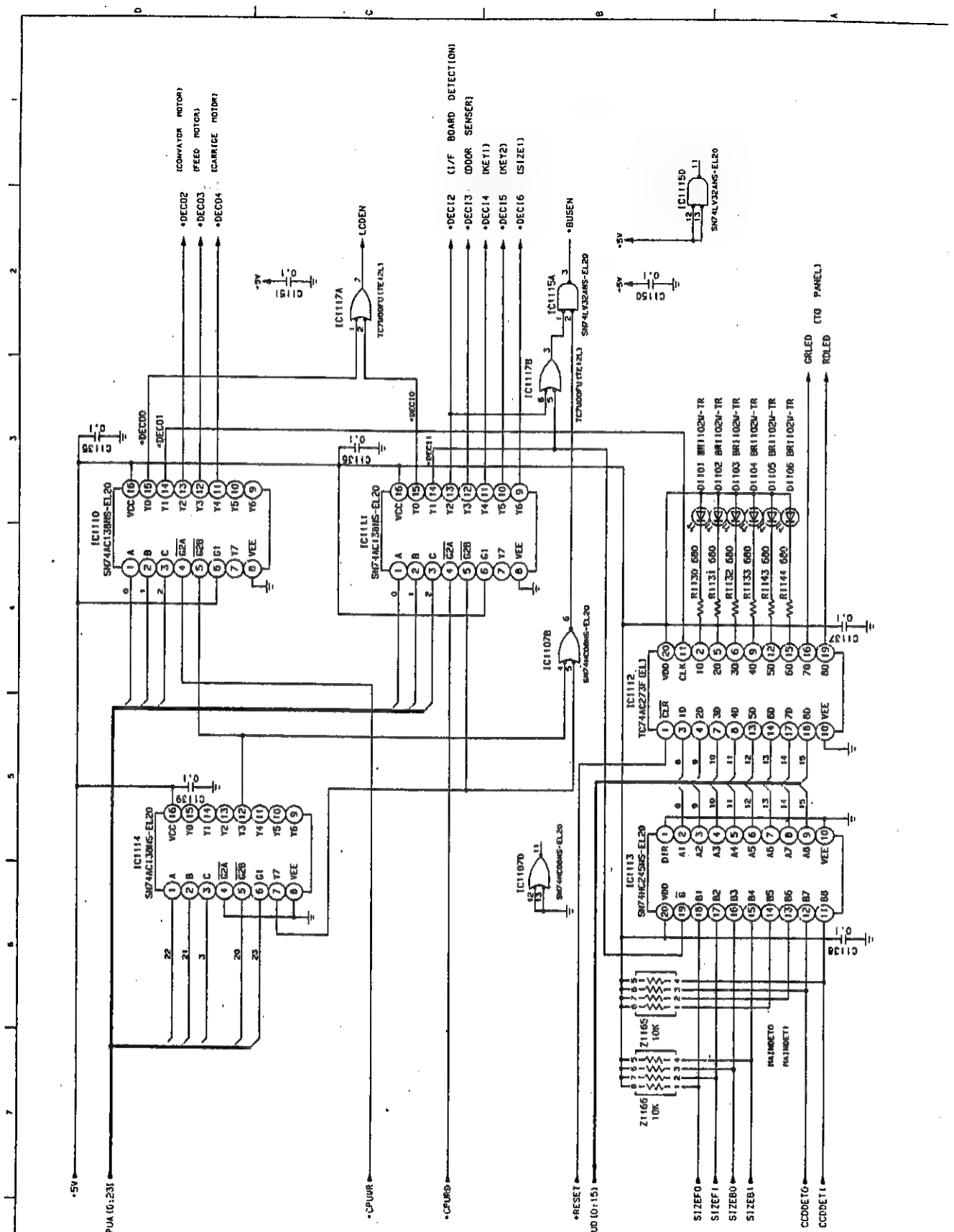

④
5V
0V
f=20MHz
Duty: 50%
2


IC1201
CXD9883
SLAA16AF0Y
BAR CODE RAM
SHADING RAM
LINE BUFFER
IC1215A
IC1215B
IC1215C
IC1215D

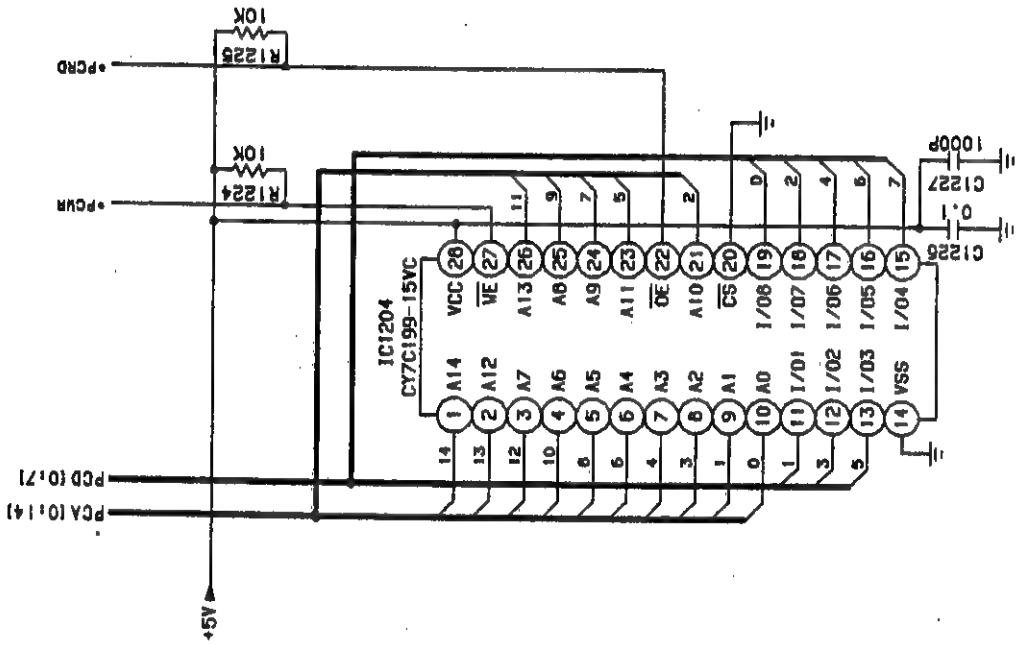
3


SLAA16AF1E
11
③
50V
0V
f=60MHz
Duty: 50%
4

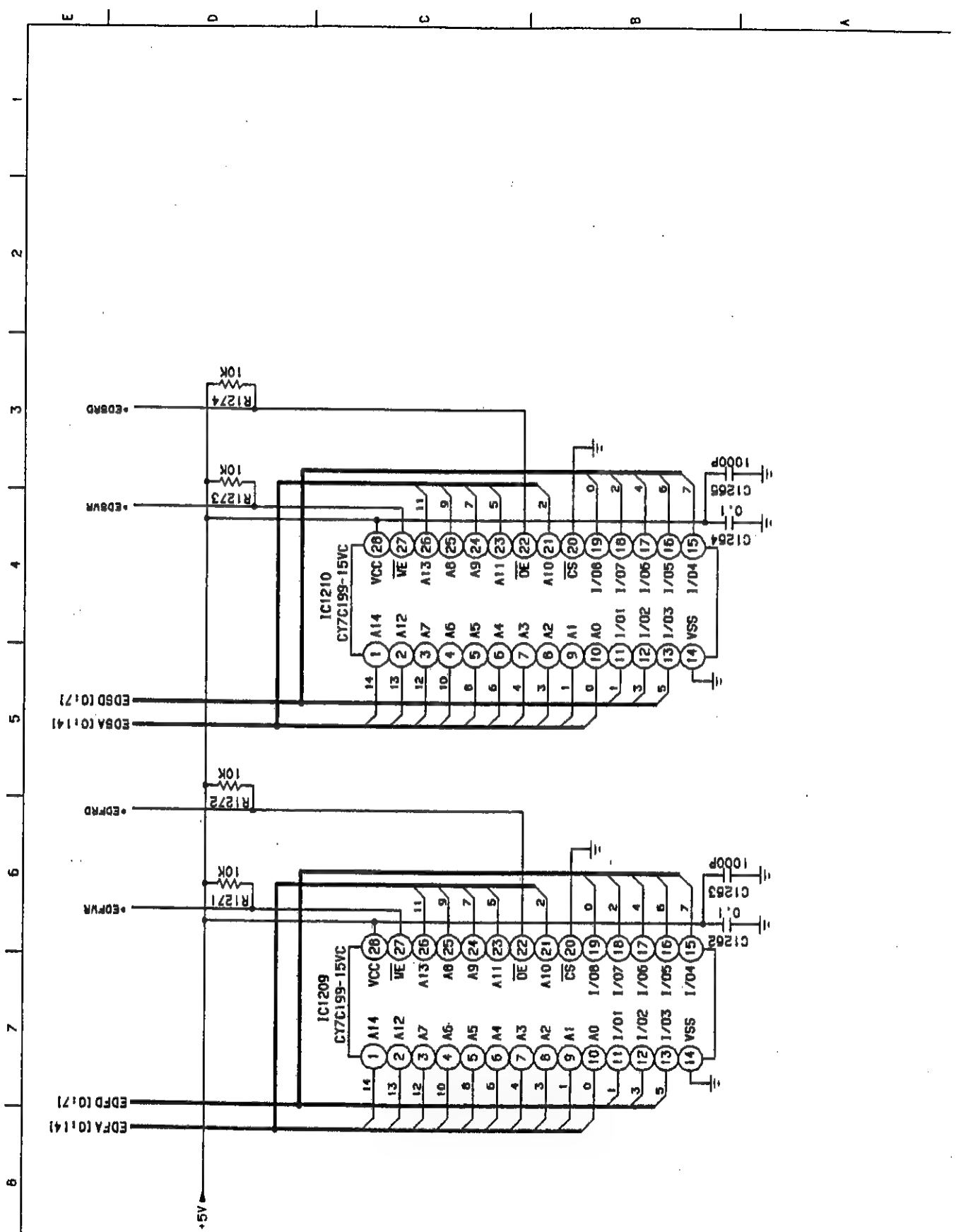



*DECO2 (CONVAYOR MOTOR)
*DECO3 (FEED MOTOR)
*DECO4 (CARRIGE MOTOR)
LCDEN
*DEC12 (I/F BOARD DETECTION)
*DEC13 (DOOR SENSER)
*DEC14 (KEY1)
*DEC15 (KEY2)
*DEC16 (SIZE1)
*BUSEN
GRLED (TO PANEL)
ROLED
IC1110
IC1111
IC1114
IC1112
IC1113
IC1115A
IC1115D
IC1117A
IC1117B
IC1107B
IC1107D
*5V
CPUA[0:23]
*CPUWR
*CPURD
*RESET
CPUD[0:15]
SIZEF0
SIZEF1
SIZEB0
SIZEB1
CCDDET0
CCDDET1
MAINDET0
MAINDET1

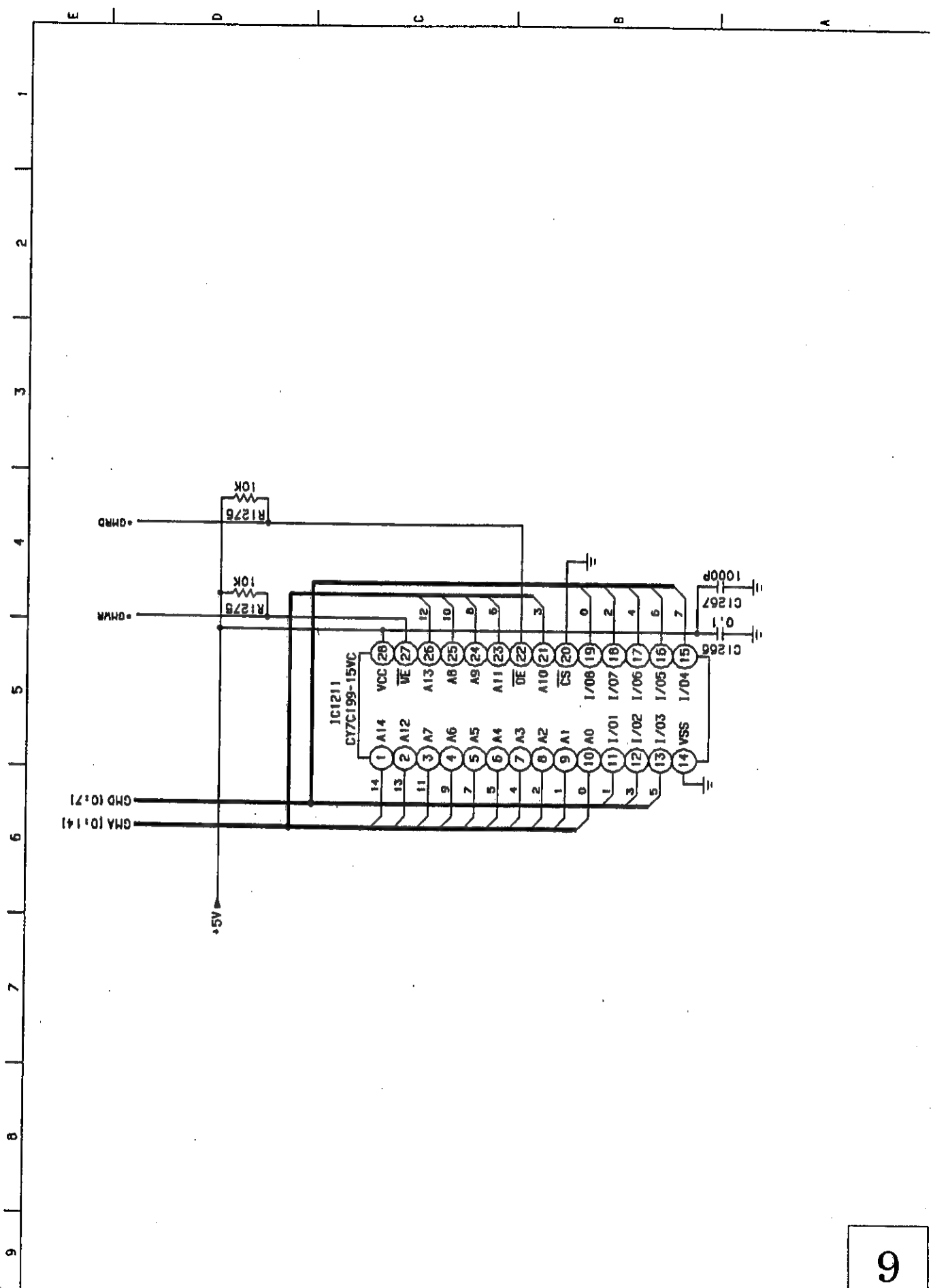
6


10K
R1225
*PCRD
10K
R1224
*PCWR
IC1204
CY7C199-15VC
VCC
VE
A13
A8
A9
A11
OE
A10
CS
I/O8
I/O7
I/O6
I/O5
I/O4
A14
A12
A7
A6
A5
A4
A3
A2
A1
A0
I/O1
I/O2
I/O3
VSS
C1226
C1227
0.1
1000P
PCD[0:7]
PCA[0:14]
+5V

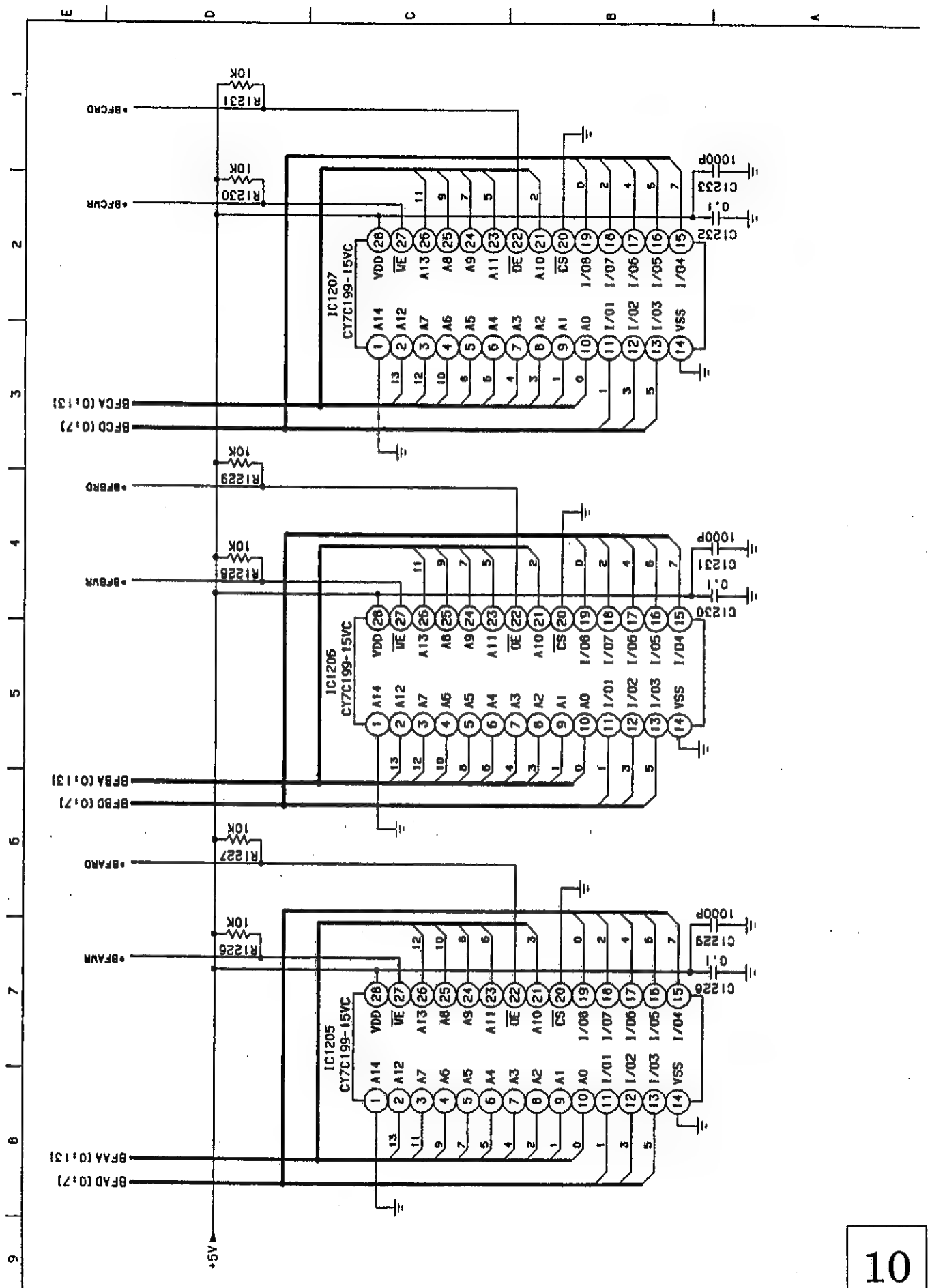
7


R1274
10K
•EDBRD
R1273
10K
•EDBWR
C1265
100P
C1264
0.1
IC1210
CY7C199-15VC
EDSD [0:7]
EDSA [0:14]
R1272
10K
•EDFRD
R1271
10K
•EDFWR
C1263
100P
C1262
0.1
IC1209
CY7C199-15VC
EDFD [0:7]
EDFA [0:14]
+5V

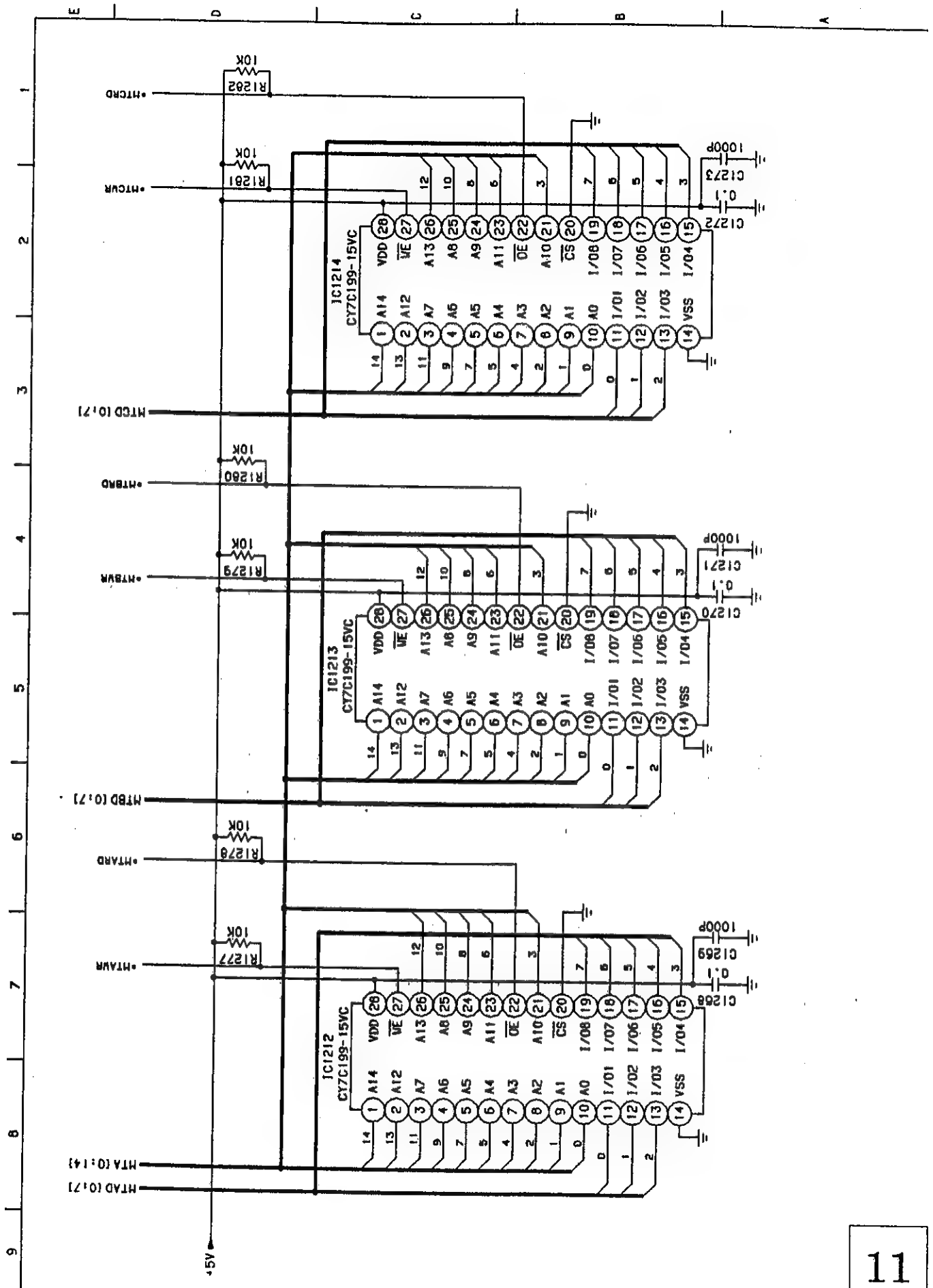
8


R1276
10K
R1278
10K
+5V
C1267
0.1
C1268
1000P
IC1211
CY7C199-15VC
VCC
WE
A13
A8
A9
A11
OE
A10
CS
I/O8
I/O7
I/O6
I/O5
I/O4
VSS
I/O3
I/O2
I/O1
A0
A1
A2
A3
A4
A5
A6
A7
A12
A14

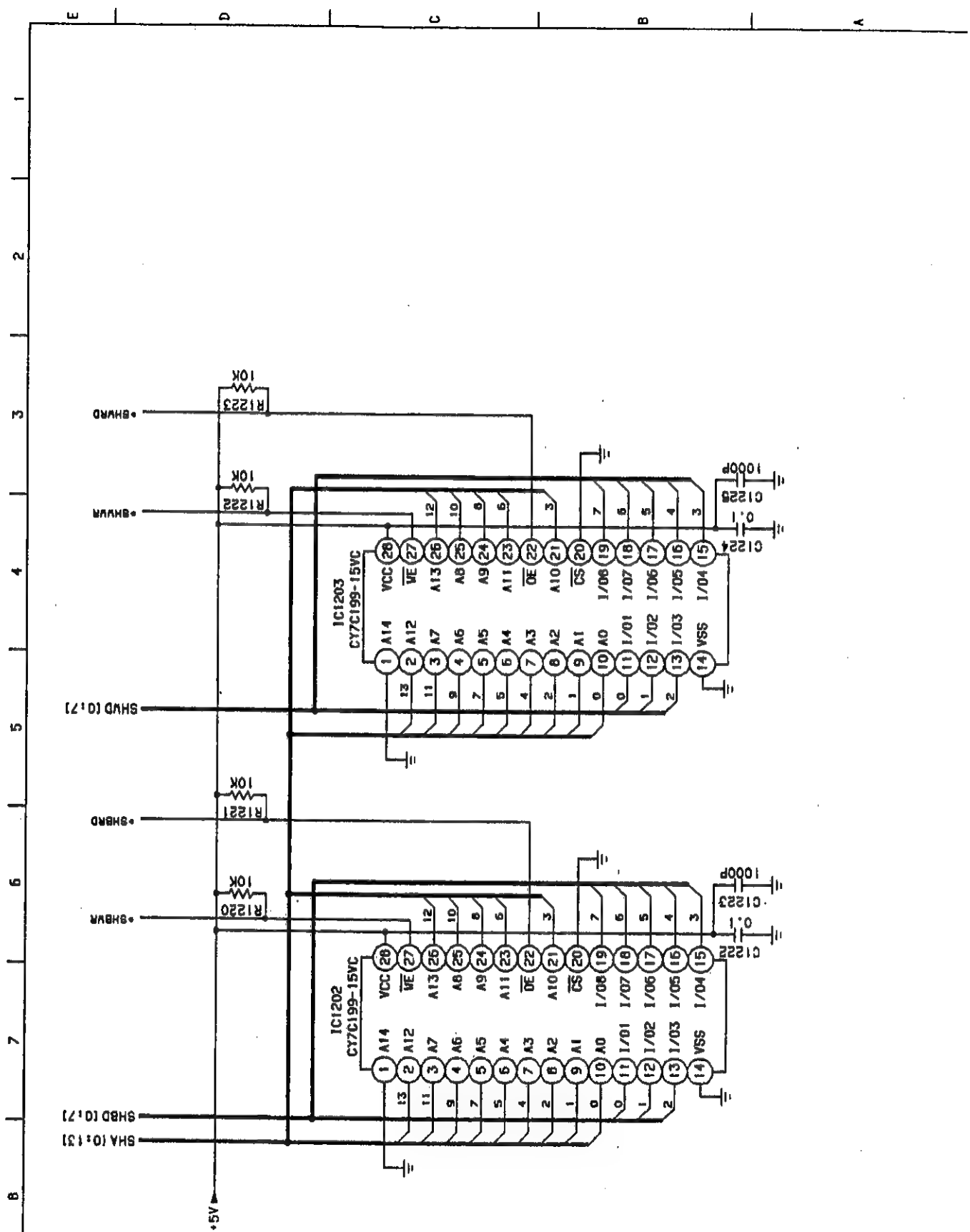
9


R1231
10K
BFCRD
R1230
BFCWR
C1233
100P
C1232
0.1
IC1207
CY7C199-15VC
BFCA [0:13]
BFCD [0:7]
R1229
BFBRD
R1228
BFBWR
C1231
C1230
IC1206
BFBA [0:13]
BFBD [0:7]
R1227
BFARD
R1226
BFAWR
C1229
C1228
IC1205
BFAA [0:13]
BFAD [0:7]
+5V

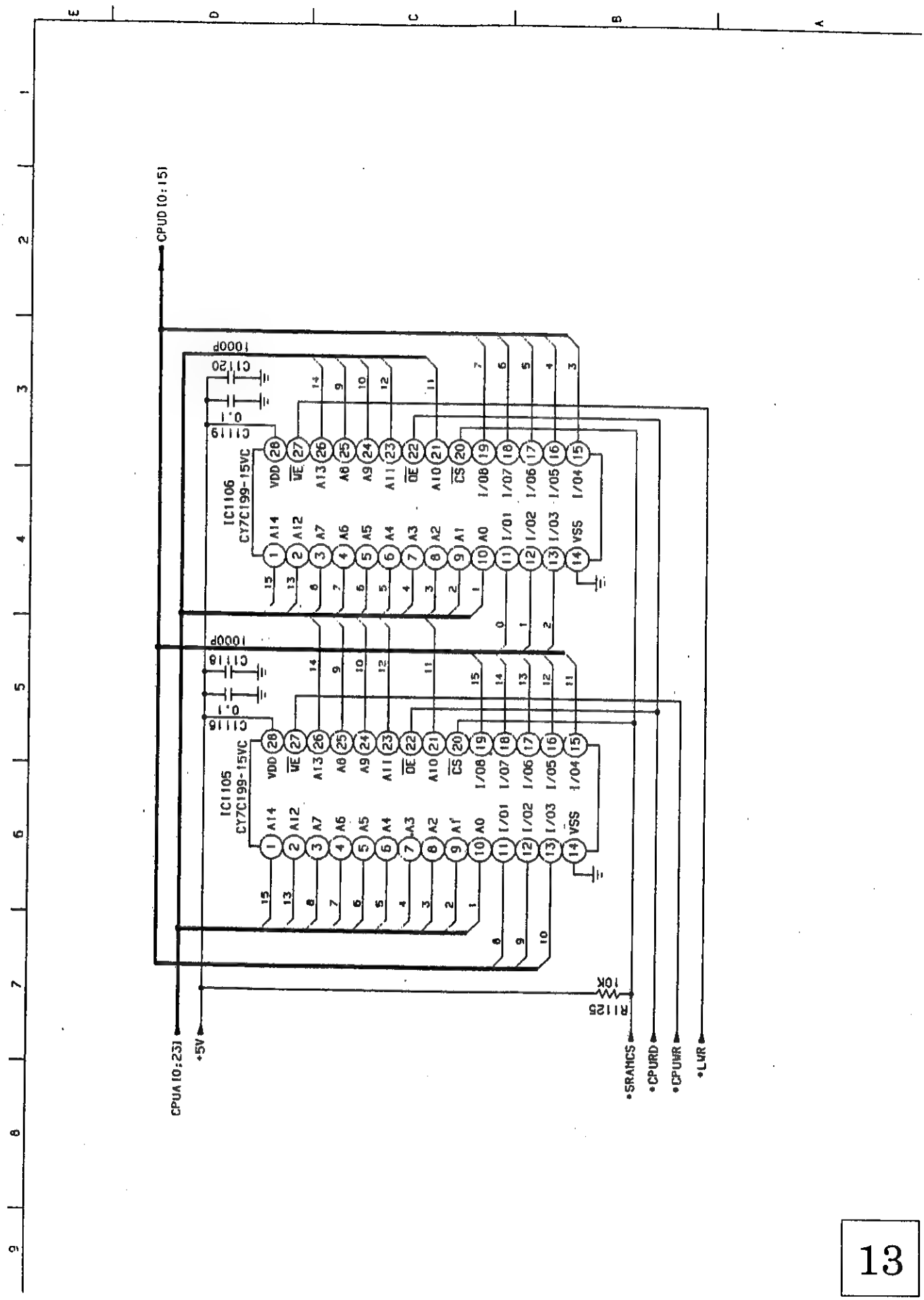
10


R1282
10K
•MTCWD
R1281
10K
•MTCWR
C1273
100P
0.1
C1272
IC1214
CY7C199-15VC
MTCD [0:7]
R1280
10K
•MTBWD
R1279
10K
•MTBWR
C1271
100P
0.1
C1270
IC1213
CY7C199-15VC
MTBD [0:7]
R1278
10K
•MTAWD
R1277
10K
•MTAWR
C1269
100P
0.1
C1268
IC1212
CY7C199-15VC
MTA [0:14]
MTAD [0:7]
+5V

11

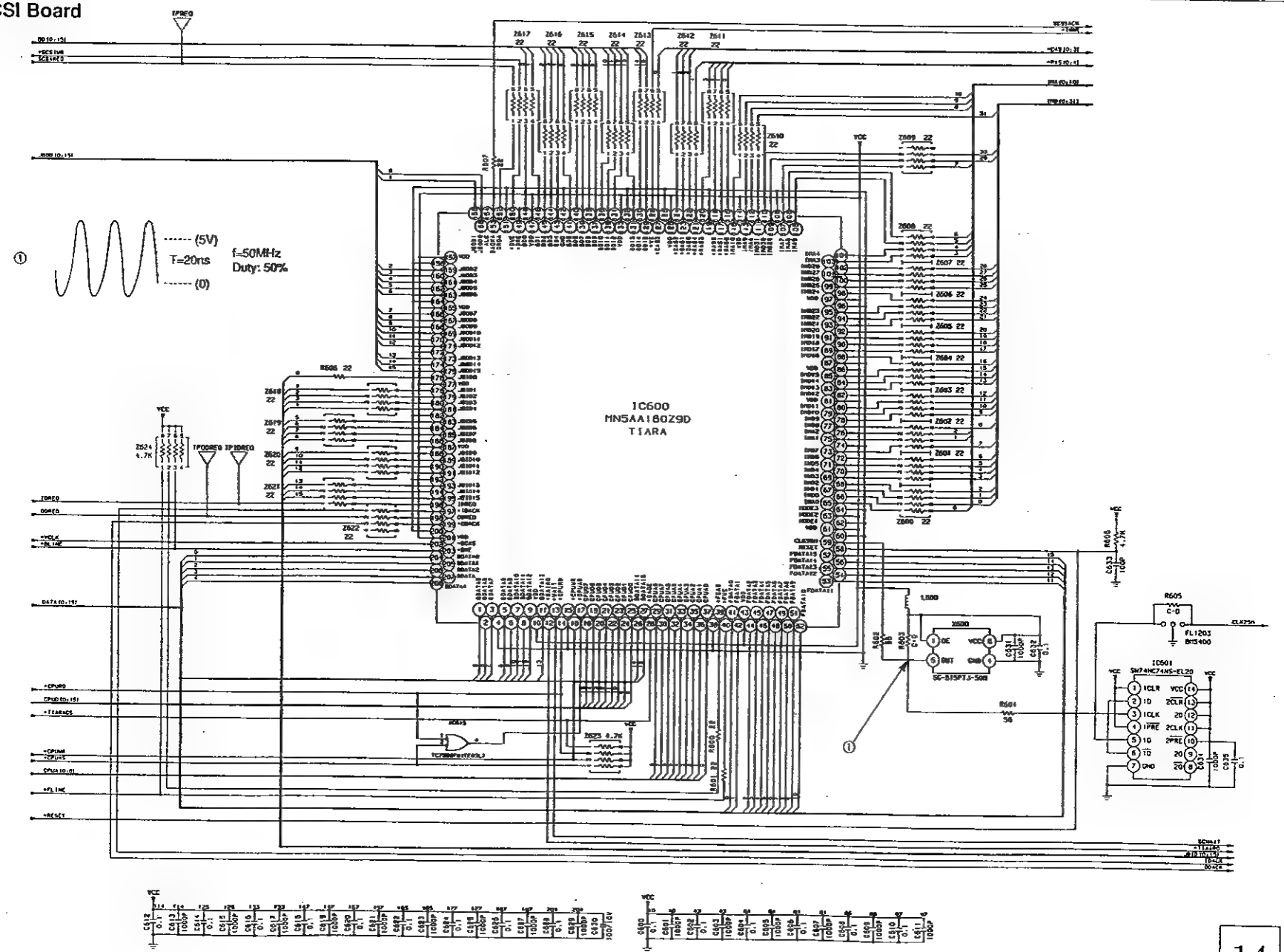

R1223
10K
R1222
10K
R1221
10K
R1220
10K
SHWRD
SHWWR
SHBRD
SHBWR
SHWD [0:7]
SHBD [0:7]
SHA [0:13]
+5V
IC1203
CY7C199-15VC
IC1202
CY7C199-15VC
C1224
C1225
C1223
C1222
0.1
1000P
VCC
WE
A13
A8
A9
A11
OE
A10
CS
I/O8
I/O7
I/O6
I/O5
I/O4
A14
A12
A7
A6
A5
A4
A3
A2
A1
A0
I/O1
I/O2
I/O3
VSS

12

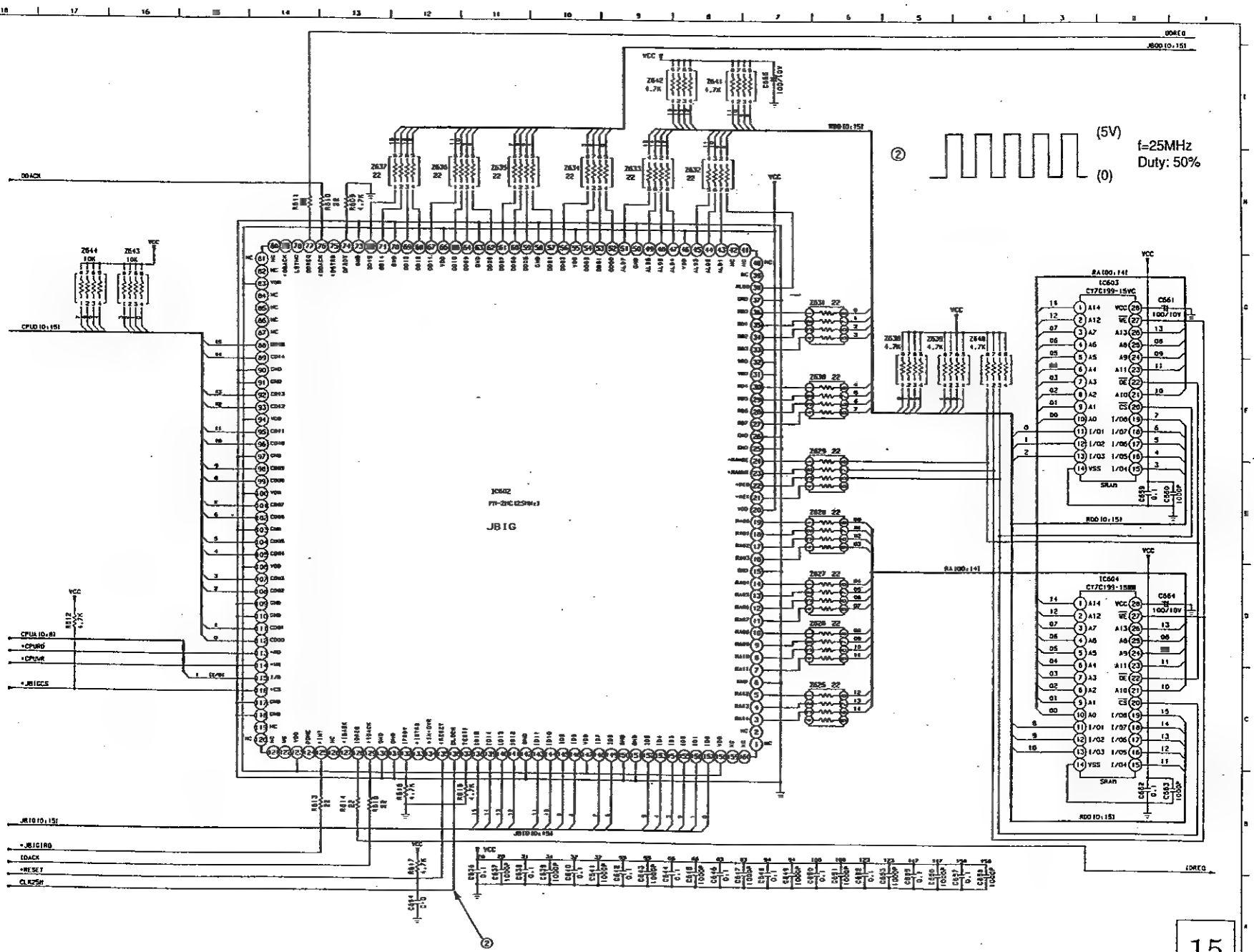

CPUD[0:15]
CPUA[0:23]
+5V
IC1106
CY7C199-15VC
IC1105
CY7C199-15VC
VDD
WE
A13
A8
A9
A11
OE
A10
CS
I/O8
I/O7
I/O6
I/O5
I/O4
VSS
I/O1
I/O2
I/O3
A14
A12
A7
A6
A5
A4
A3
A2
A1
A0
C1120
C1119
C1118
0.1
1000P
R1125
10K
•SRAMCS
•CPURD
•CPUWR
•LWR

13

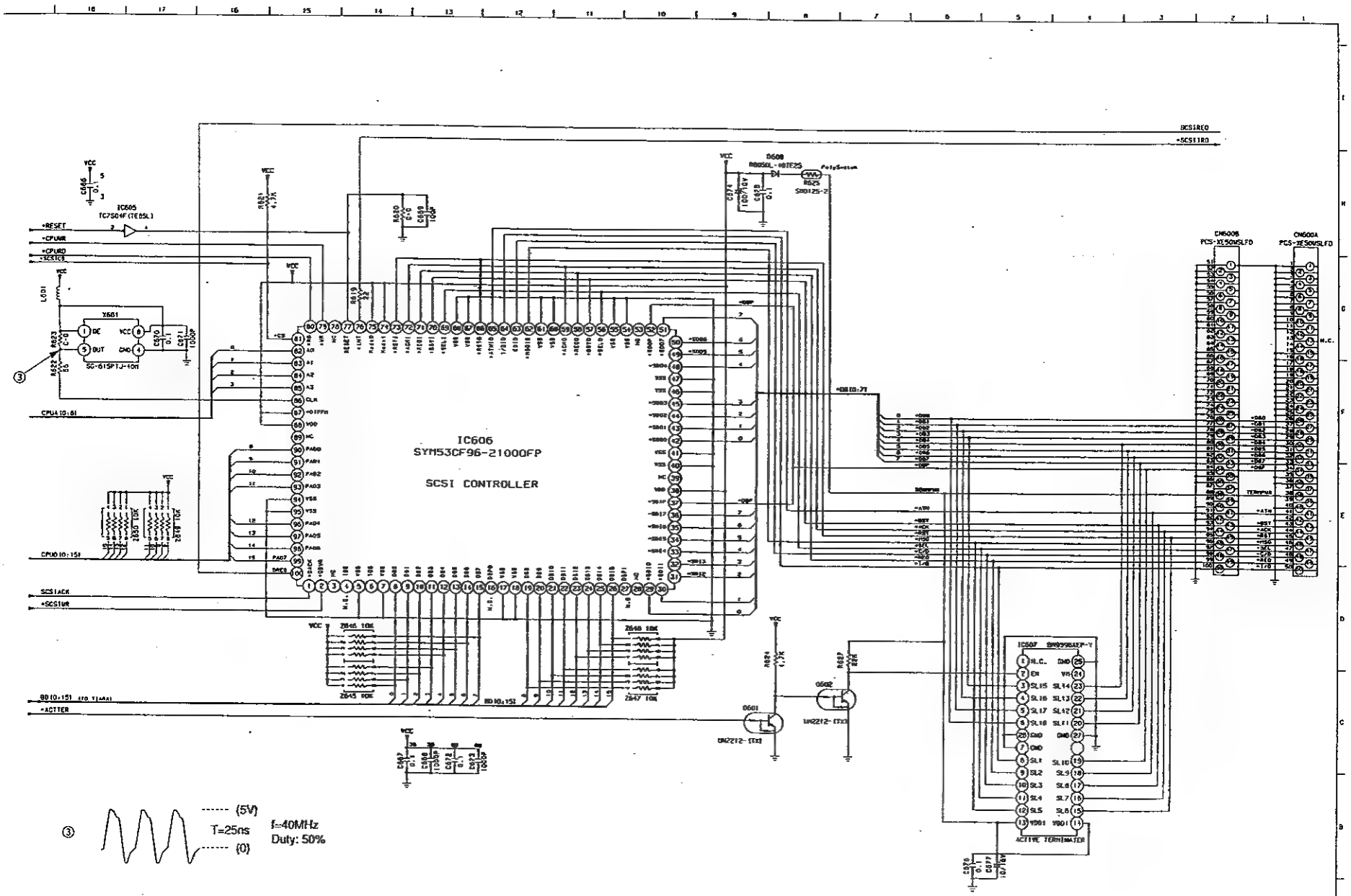
13.2 SCSI Board



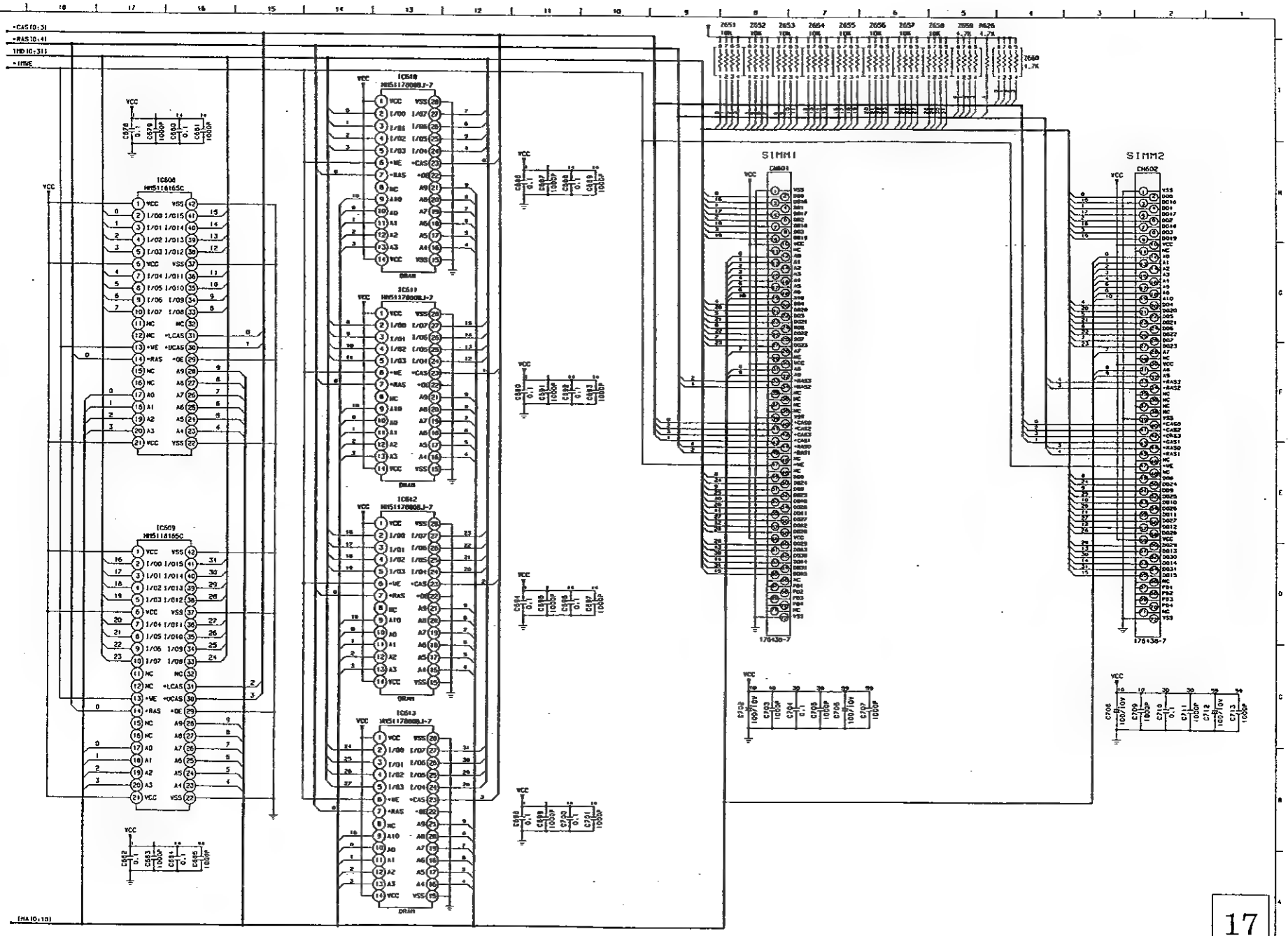
14

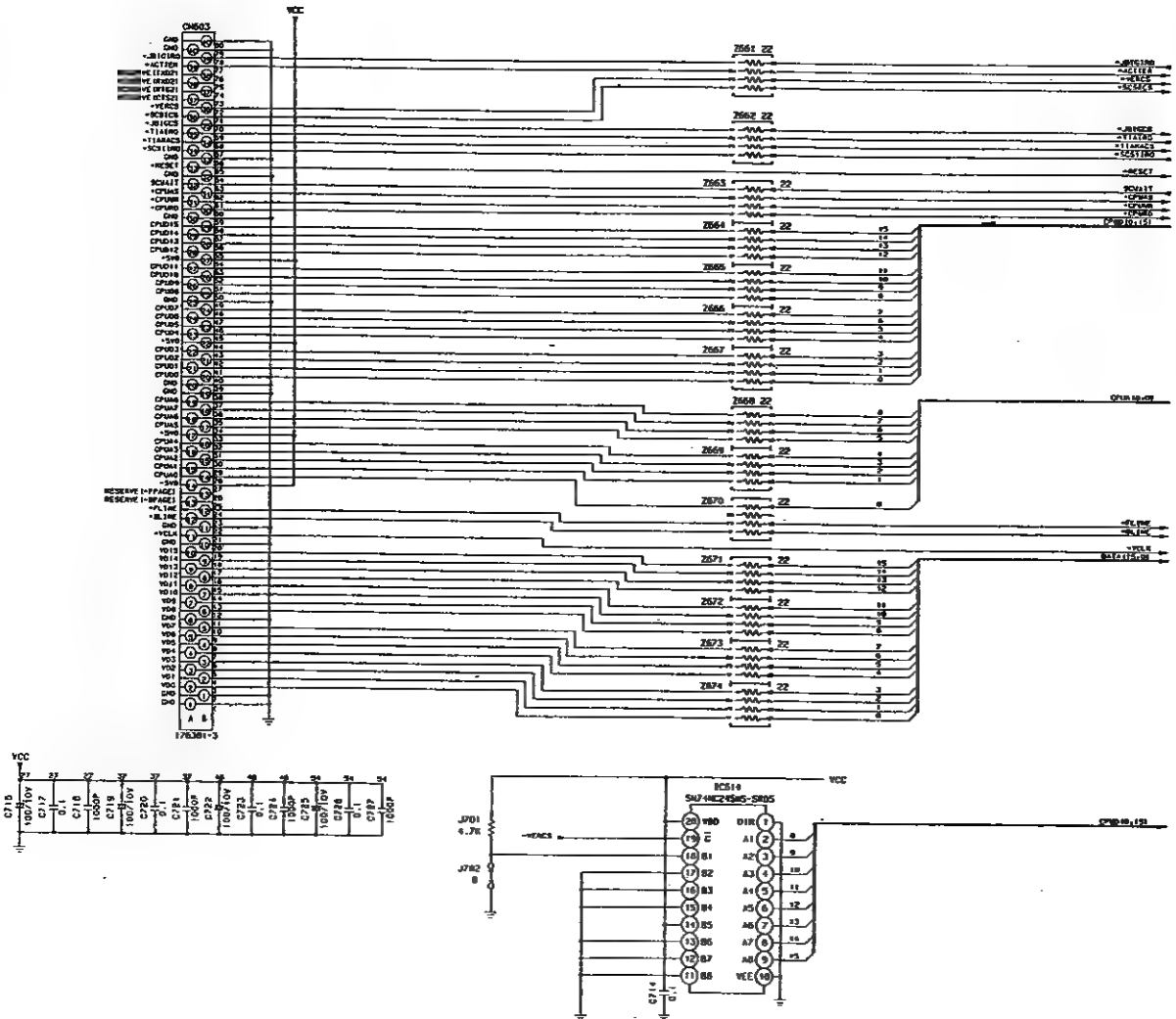


15

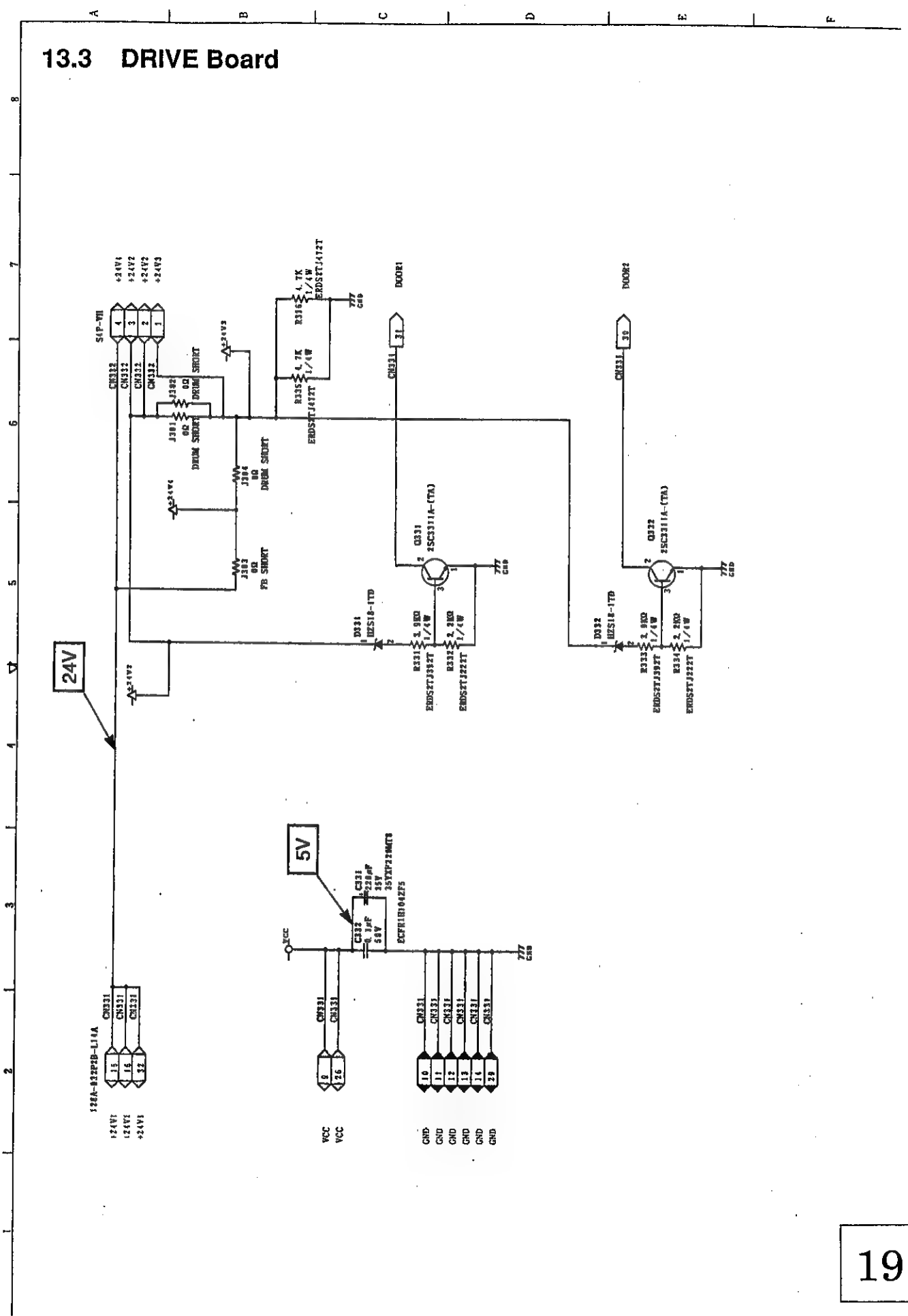

IC606
SYM53CF96-21000FP
SCSI CONTROLLER
IC605
TC7S04F(TE85L)
X601
SC-615PTJ-40M
ACTIVE TERMINATOR
③
(5V)
T=25ns
(0)
f=40MHz
Duty: 50%

16

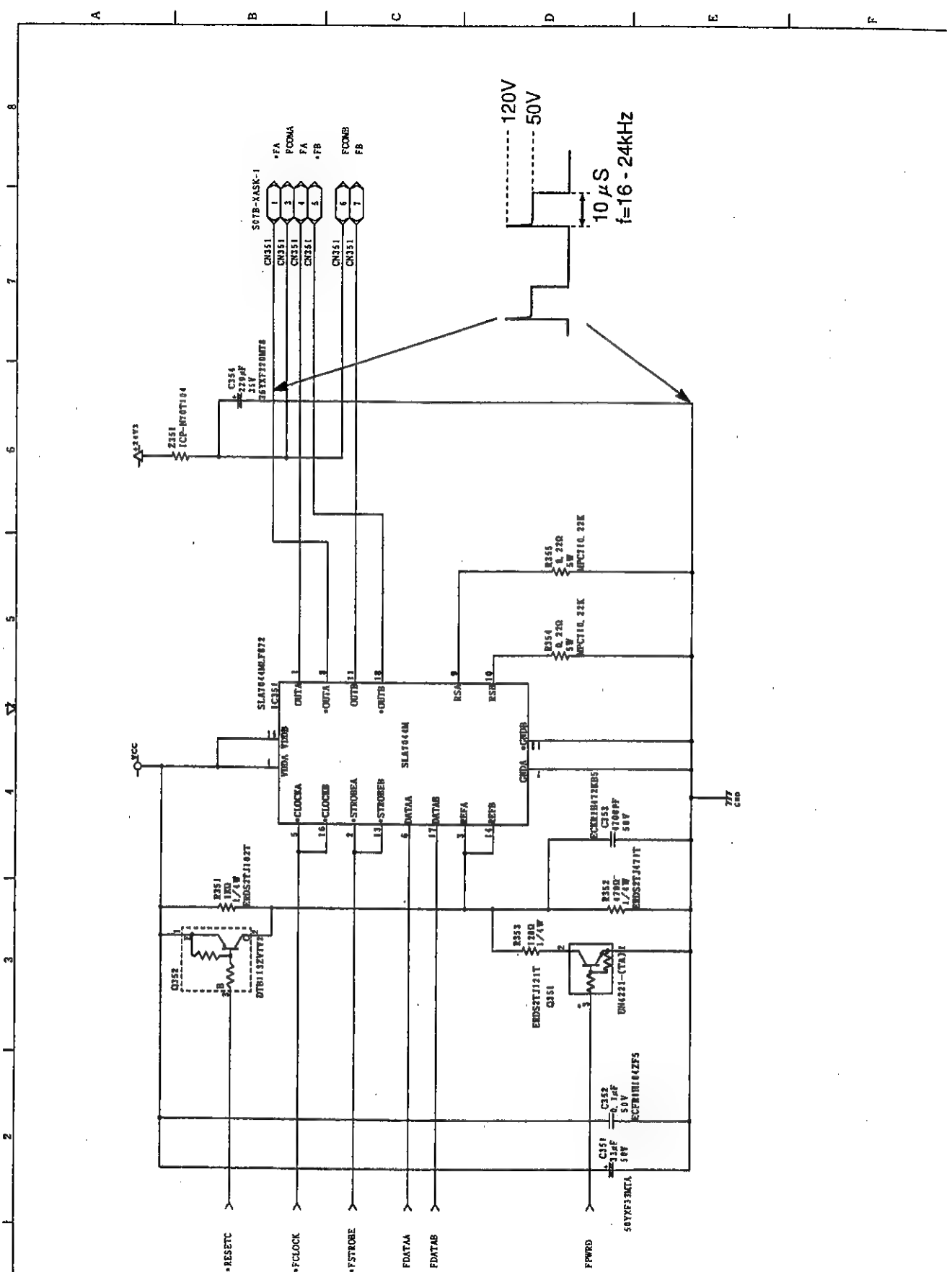

SIMM1
SIMM2
IC508
IC509
IC510
IC511
IC512
IC513
DRAM
17



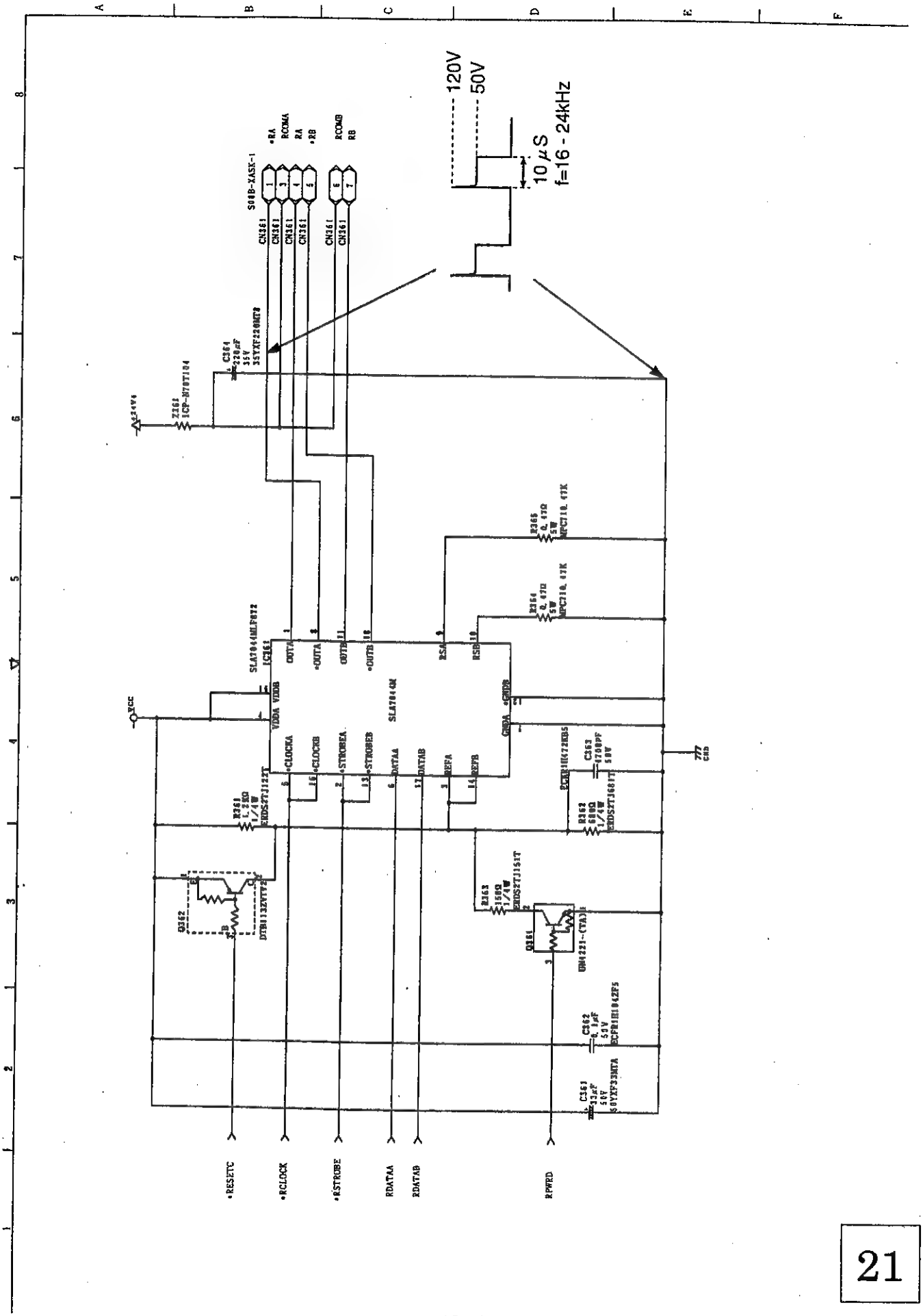
13.3 DRIVE Board



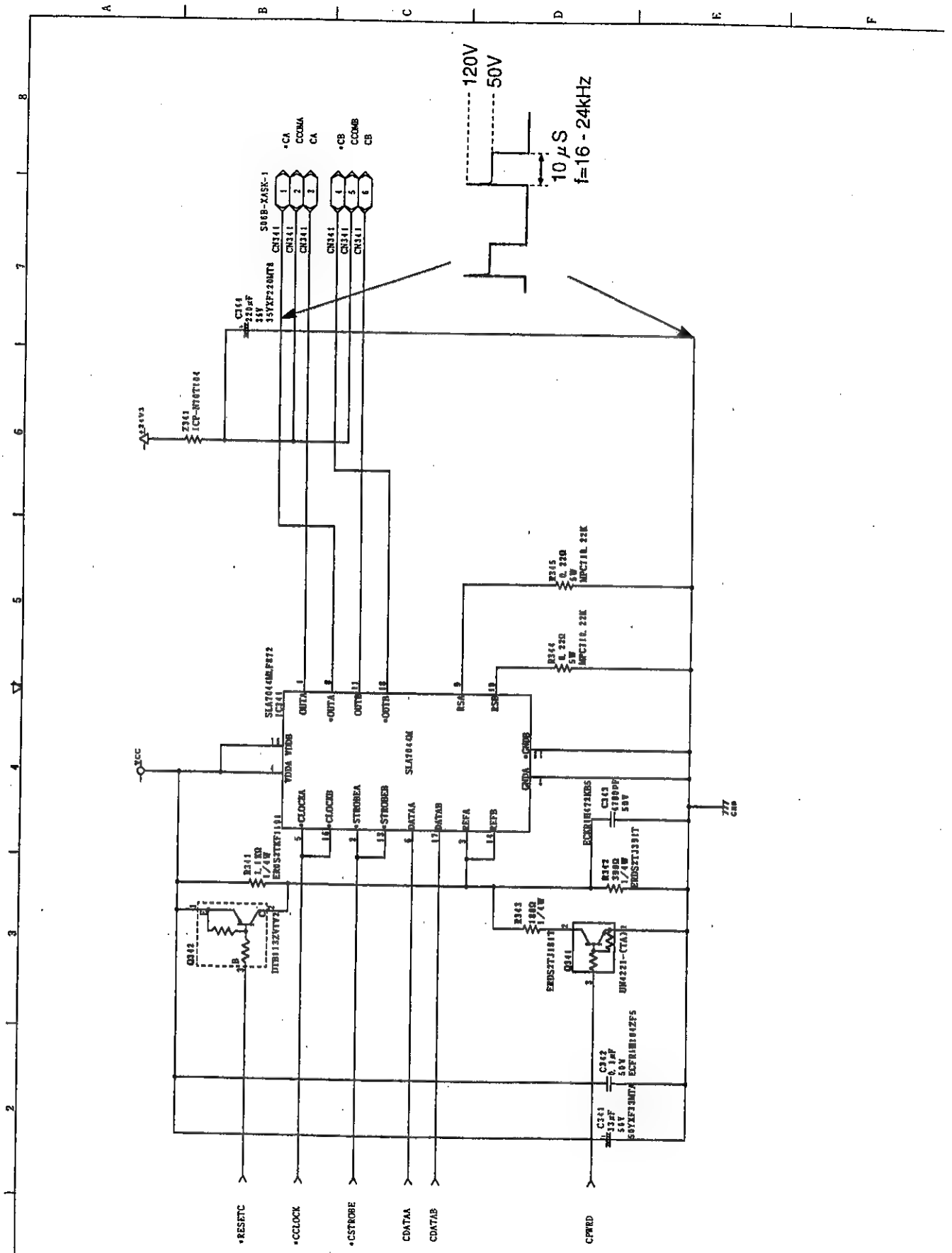
19


120V
50V
10 μS
f=16 - 24kHz
*RESETC
*FCLOCK
*FSTROBE
FDATAA
FDATAB
FPWRD

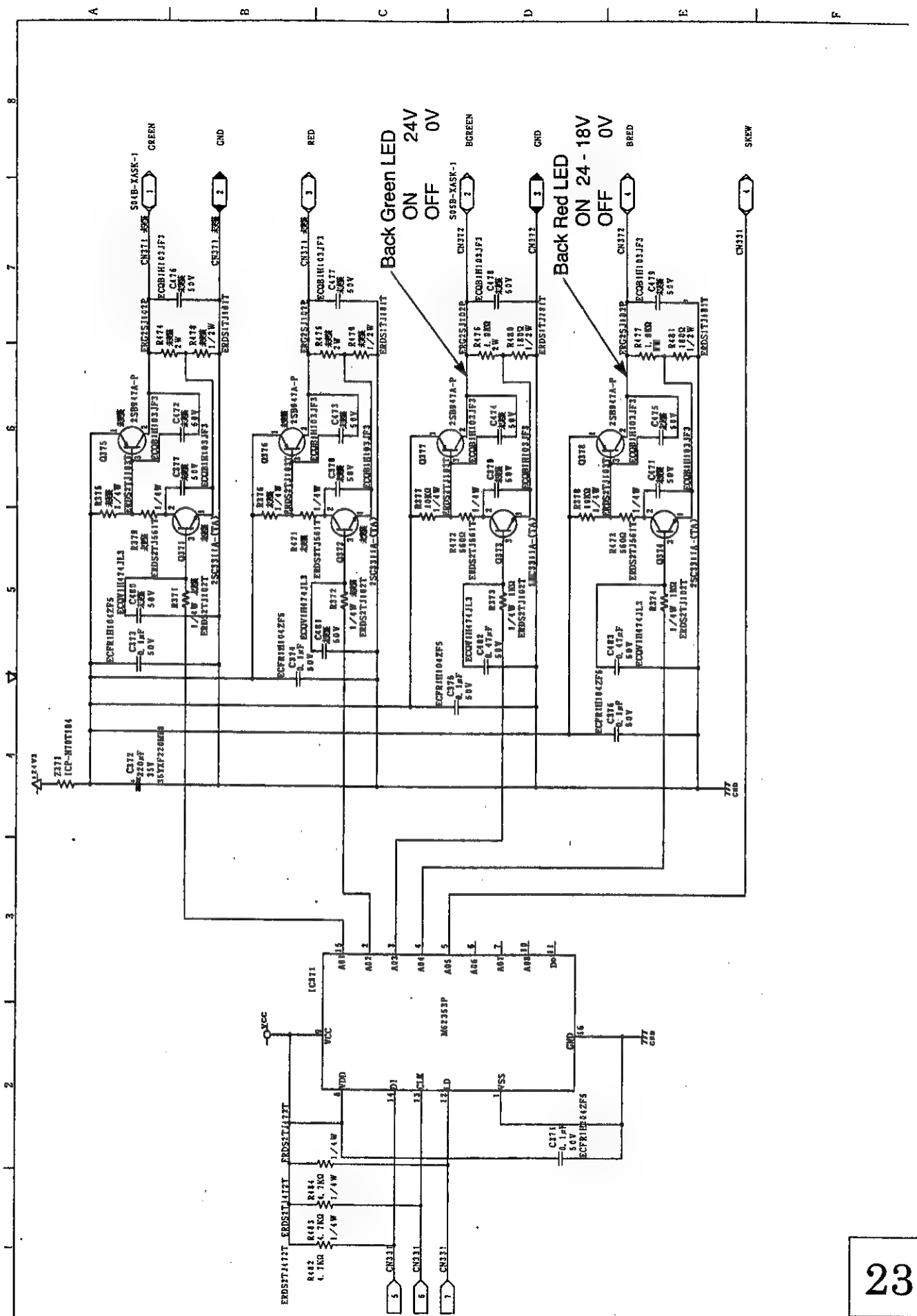
20

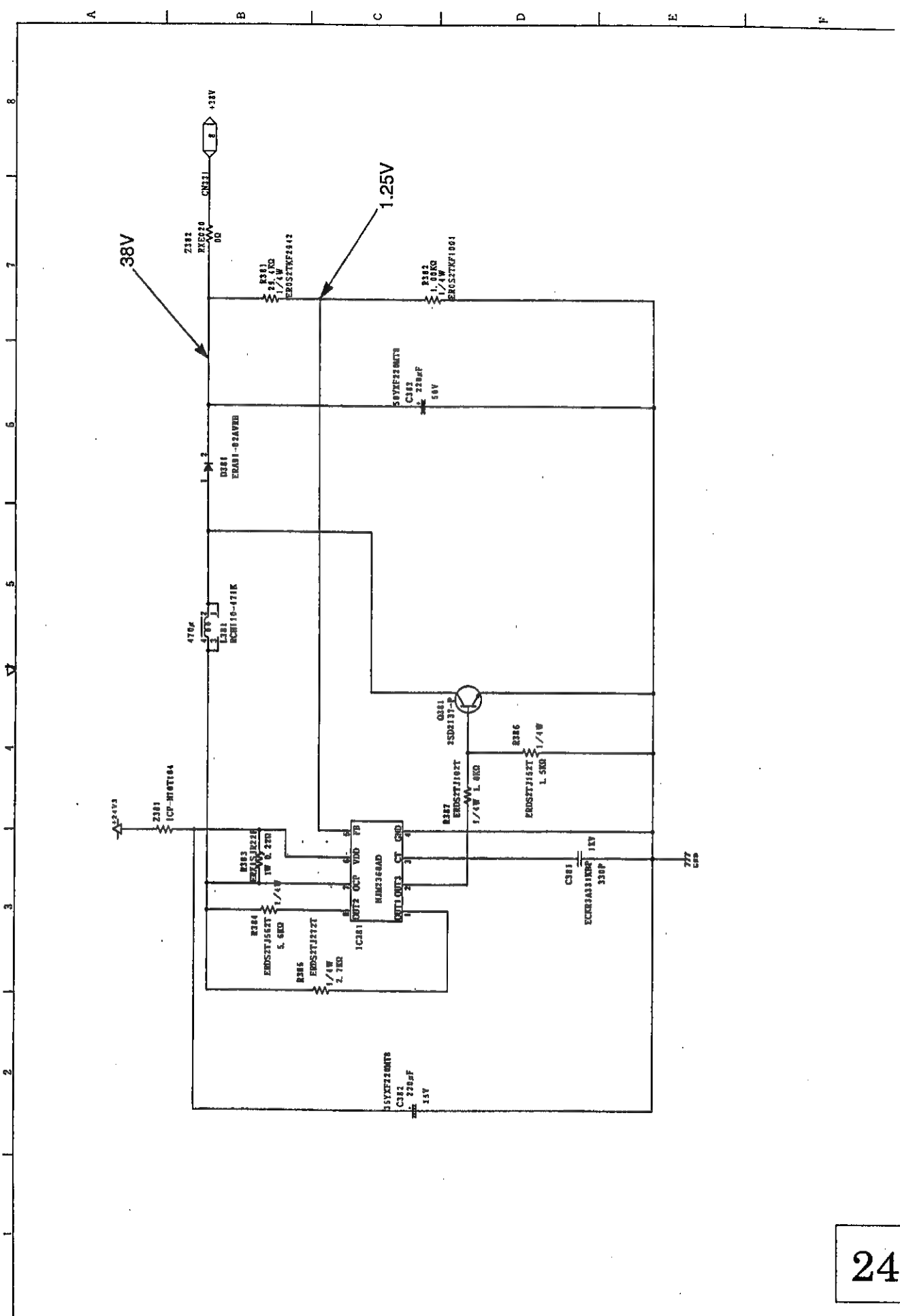

120V
50V
10 μS
f=16 - 24kHz
*RESETC
*RCLOCK
*RSTROBE
RDATAA
RDATAB
RPWRD

21

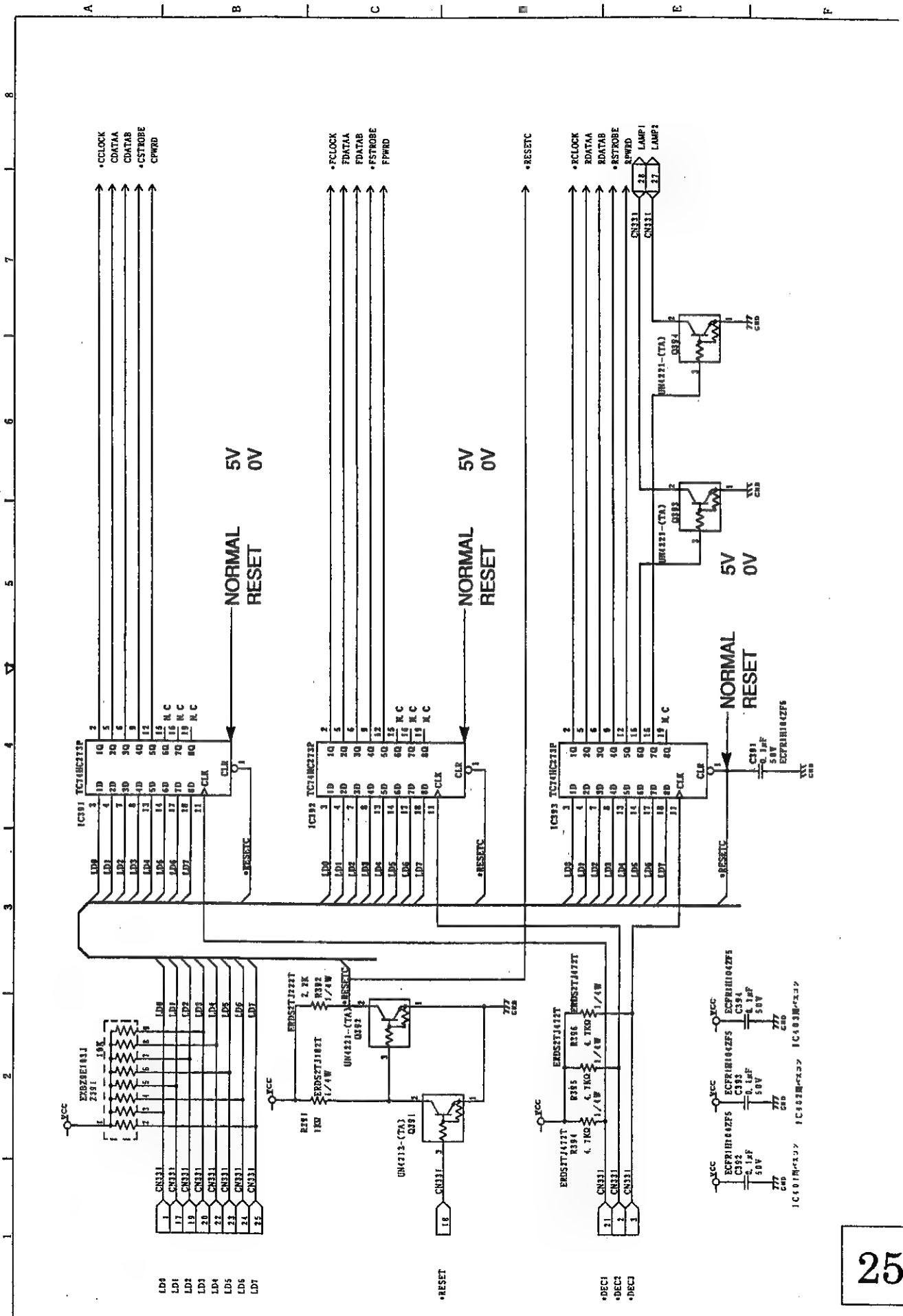

120V
50V
10 μS
f=16 - 24kHz
*RESETC
*CCLOCK
*CSTROBE
CDATAA
CDATAB
CPWRD

22


Back Green LED
ON 24V
OFF 0V
Back Red LED
ON 24 - 18V
OFF 0V
GREEN
GND
RED
BGREEN
BRED
SKEW
CN331
CN372
IC371
M62353P
VCC
GND

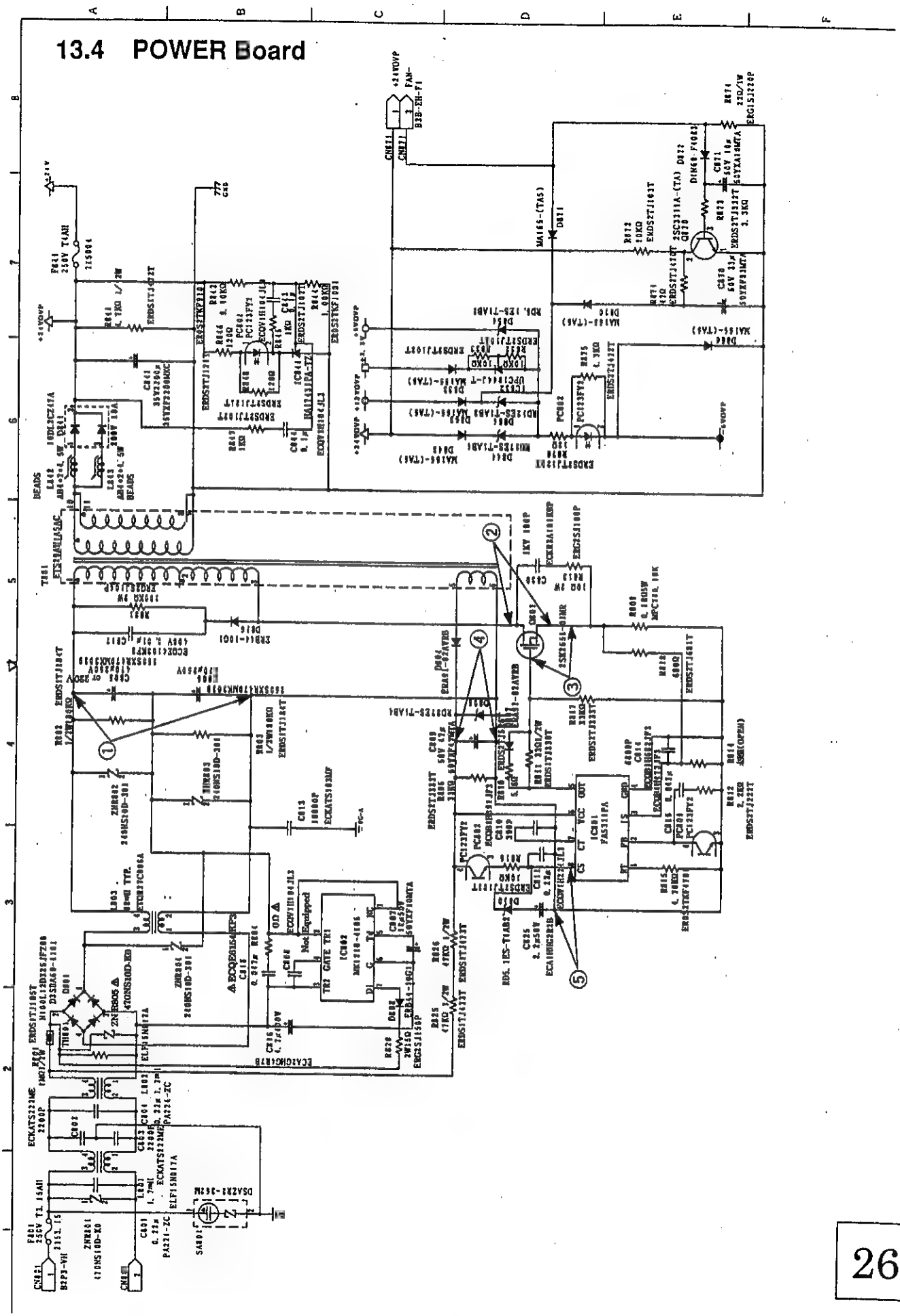


24


NORMAL
RESET
5V
0V
*CCLOCK
CDATAA
CDATAB
*CSTROBE
CPWRD
*FCLOCK
FDATAA
FDATAB
*FSTROBE
FPWRD
*RESETC
*RCLOCK
RDATAA
RDATAB
*RSTROBE
RPWRD
LAMP1
LAMP2
*RESET
*DEC1
*DEC2
*DEC3

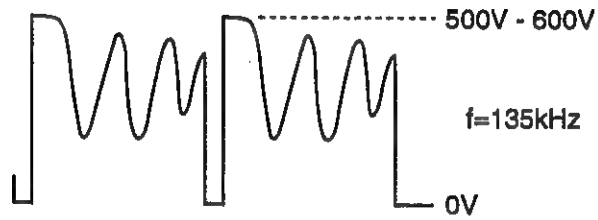
25

13.4 POWER Board



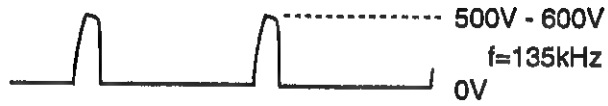
①	AC	120V:	320V	DC	(NO Load, Fan Only)
	AC	220V:	300V	DC	(NO Load, Fan Only)
	AC	230V:	310V	DC	(NO Load, Fan Only)
	AC	240V:	330V	DC	(NO Load, Fan Only)
	AC	100V:	270V	DC	(NO Load, Fan Only)

② Q801
D - S



(No Load, Fan Only)

③ Q801
G - S

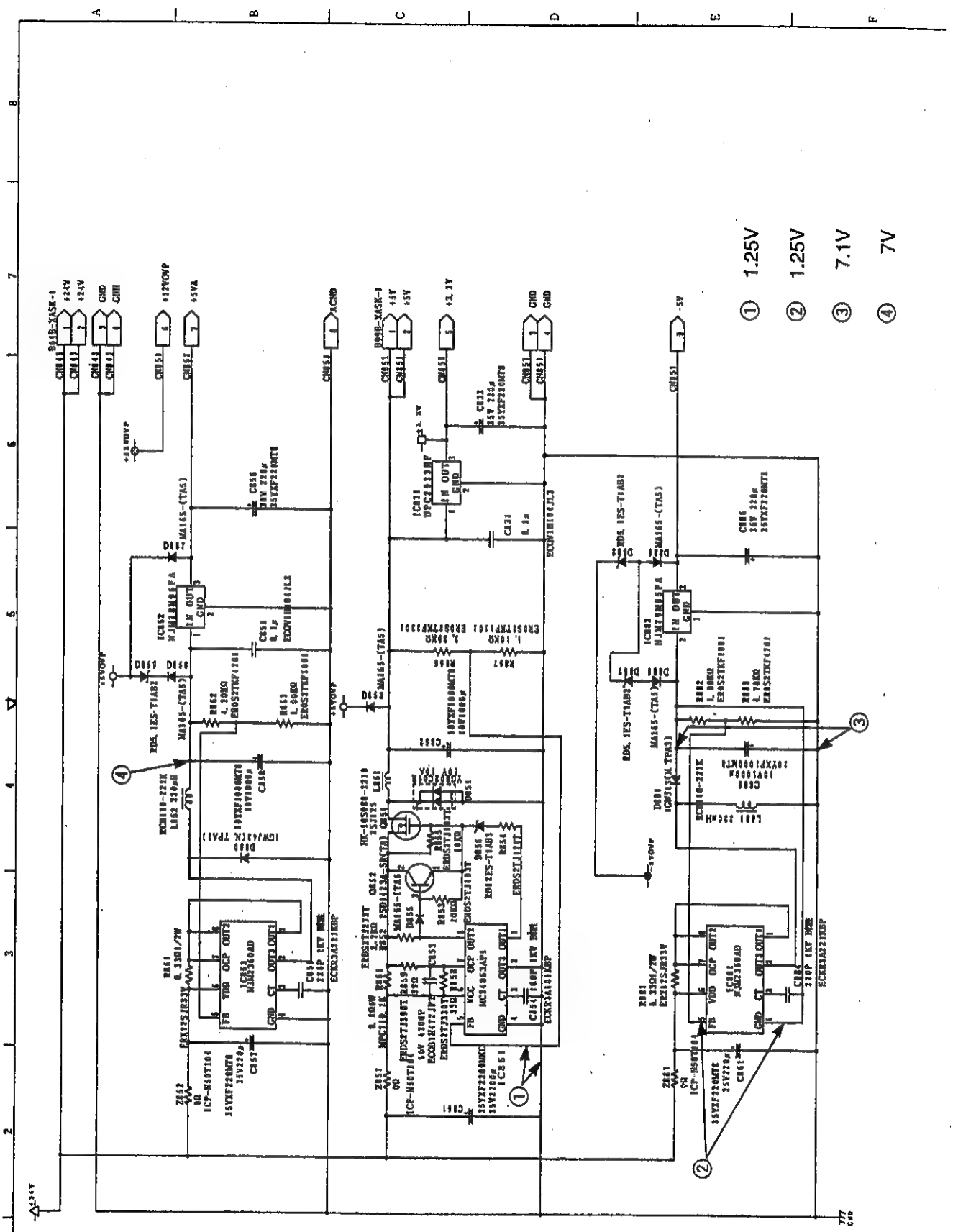


(No Load, Fan Only)

④ C809 DC 15 - 22V

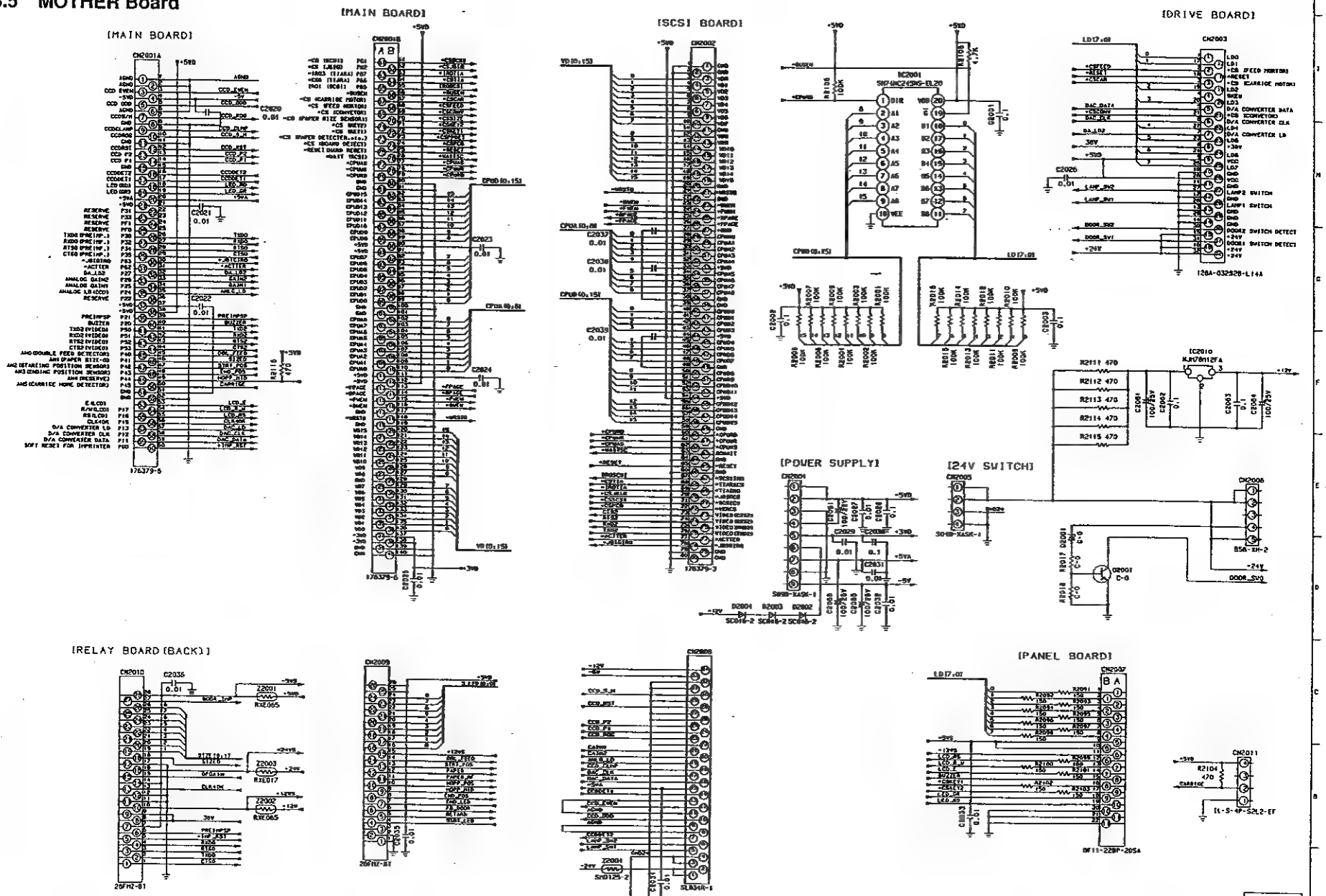
⑤ Normal: 3.6V } ..... DC Over-voltage protector operation check
Protection circuit functioning: 8V } DC Fan protector operation check

Note: If the protection circuit is functioned, turn OFF the power switch. After 5 minutes or more, turn ON the power switch again for restart

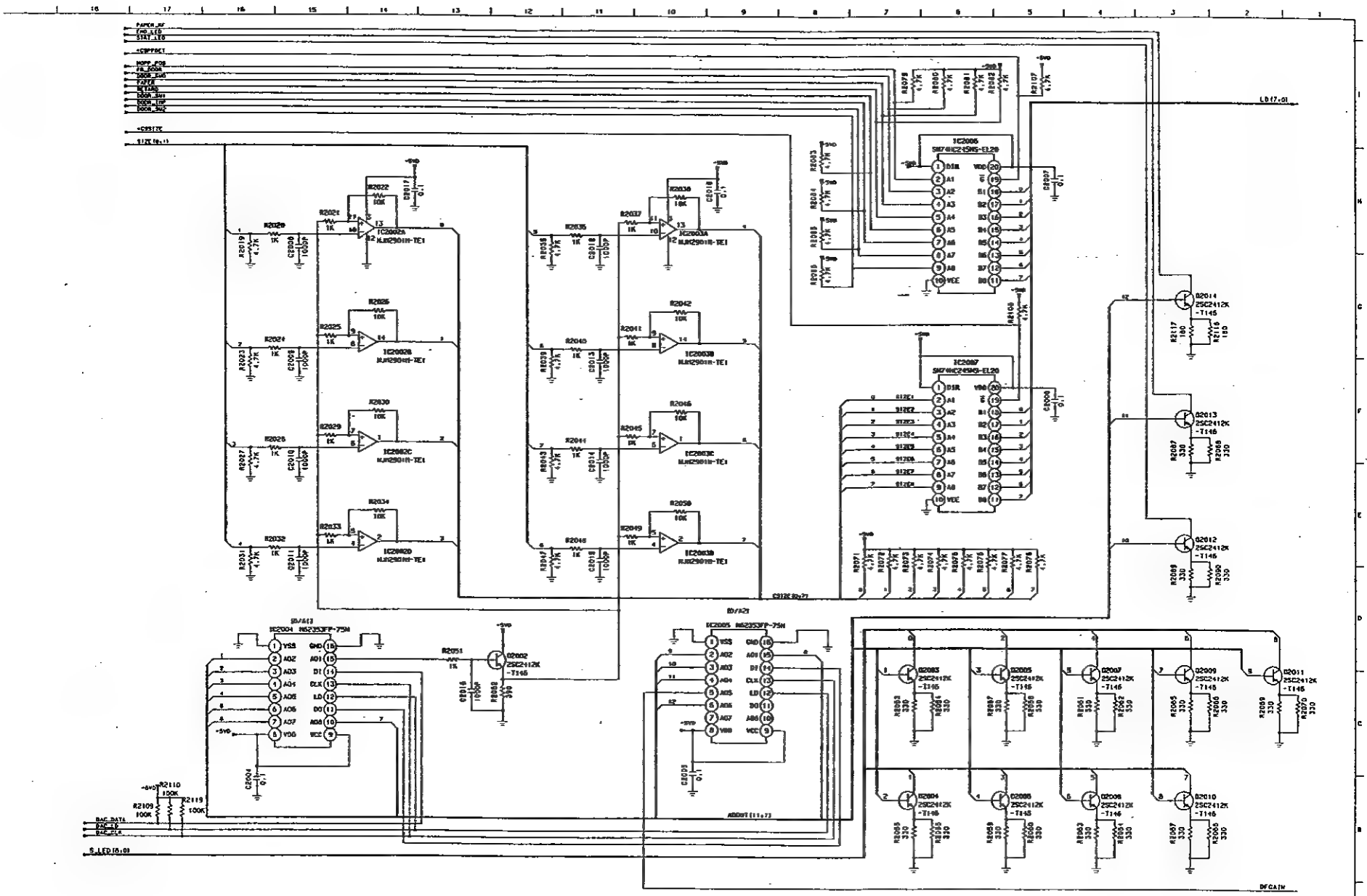


27

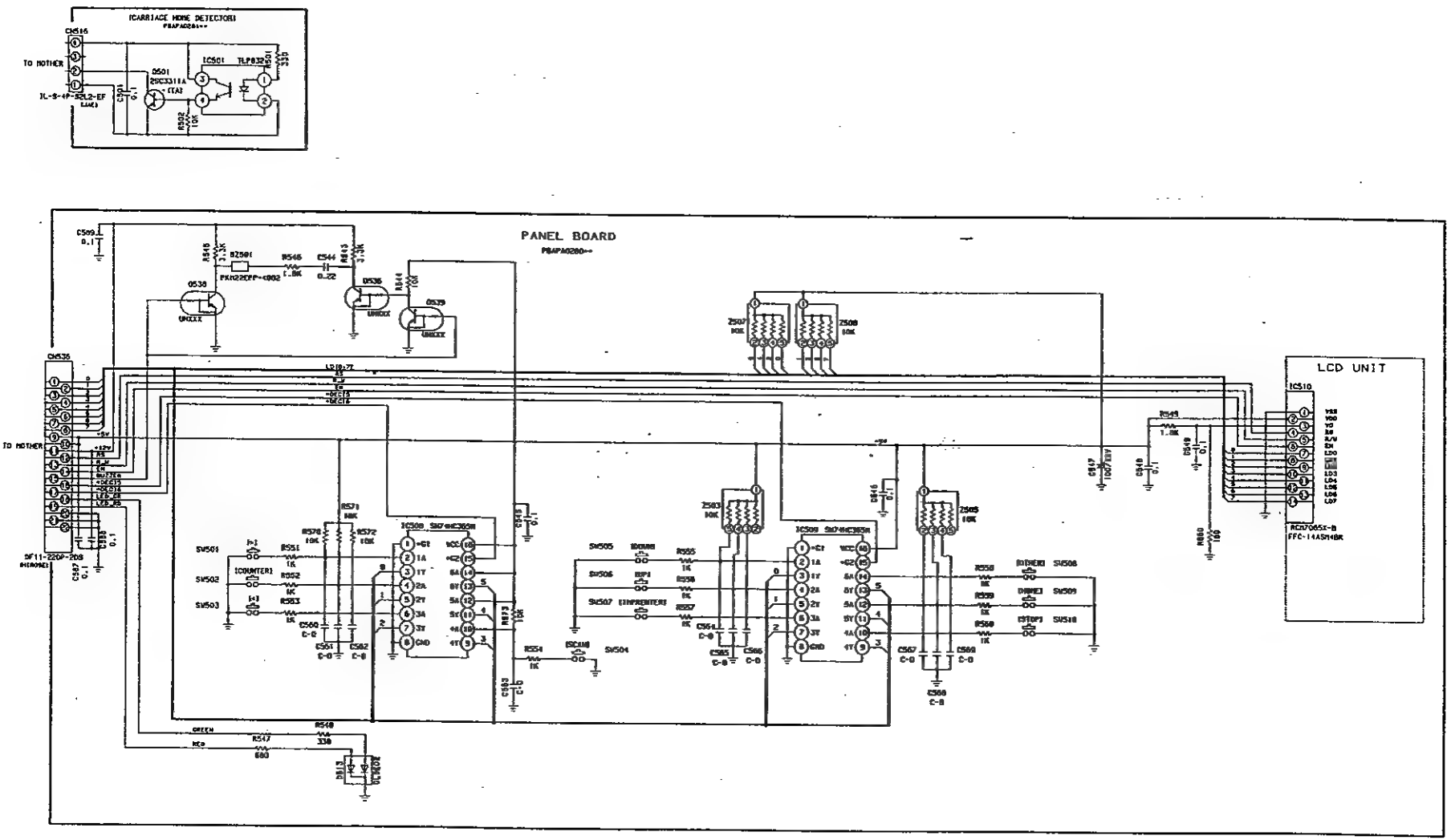
13.5 MOTHER Board



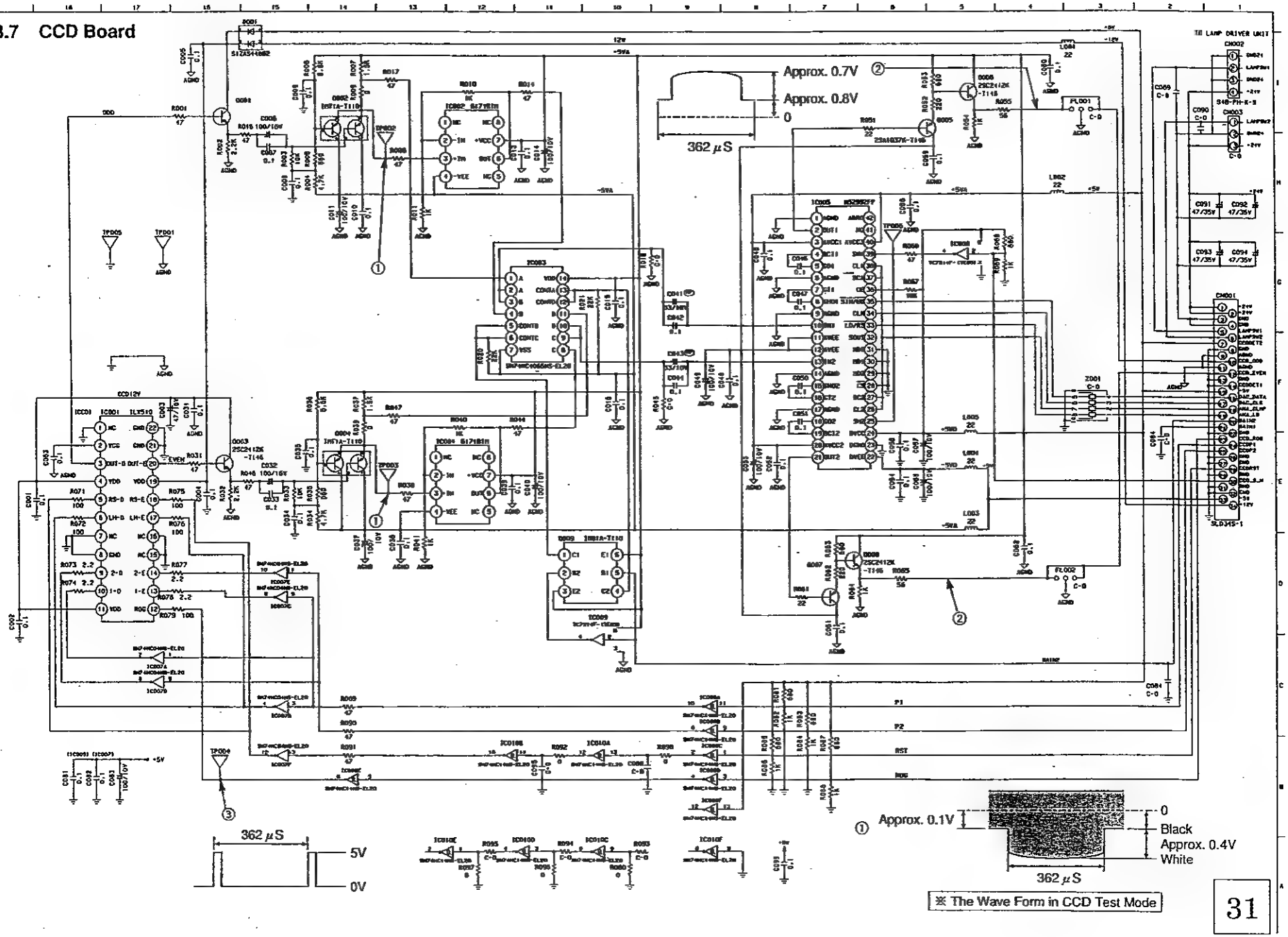
28



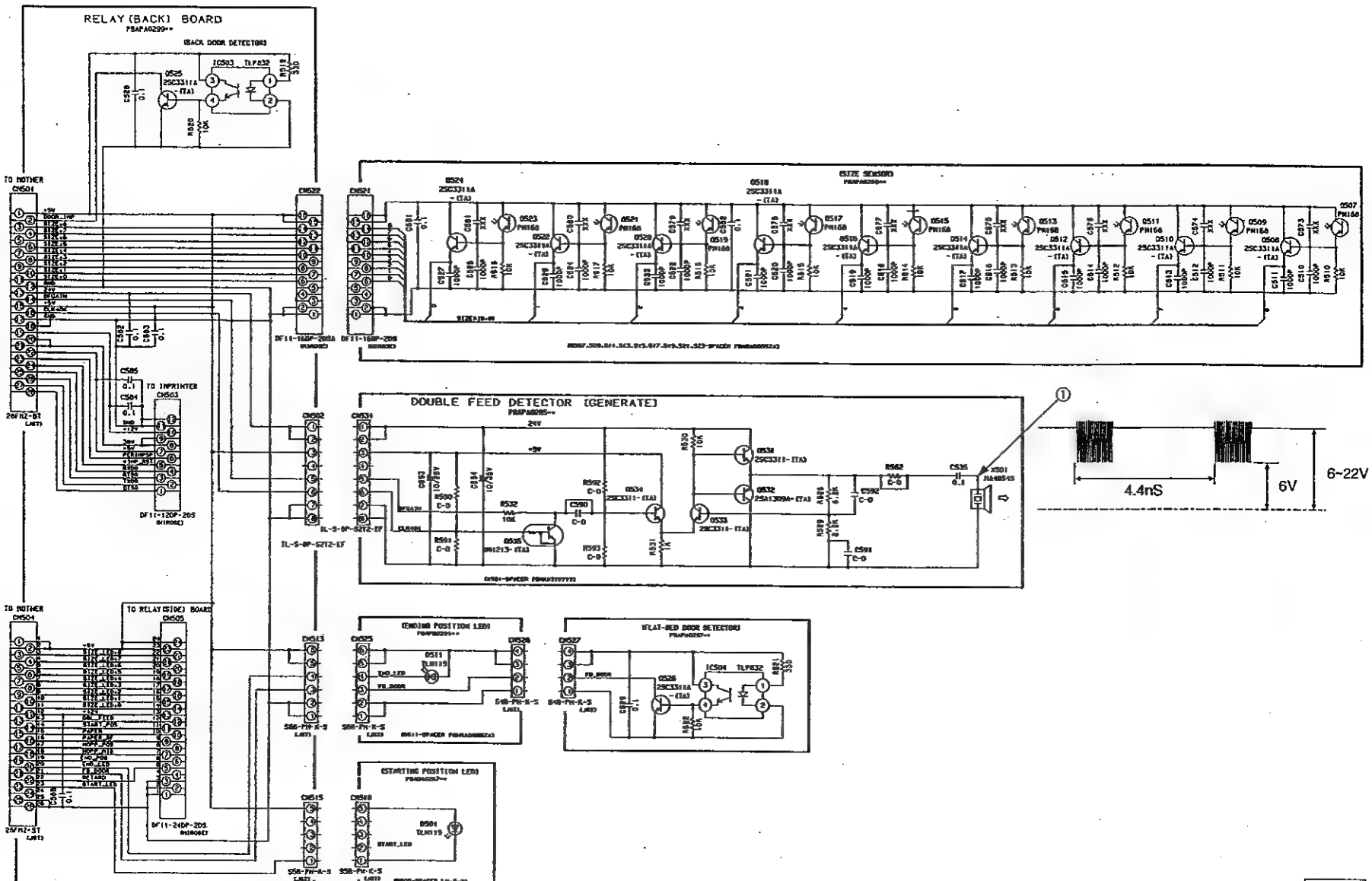
13.6 PANEL Board



13.7 CCD Board

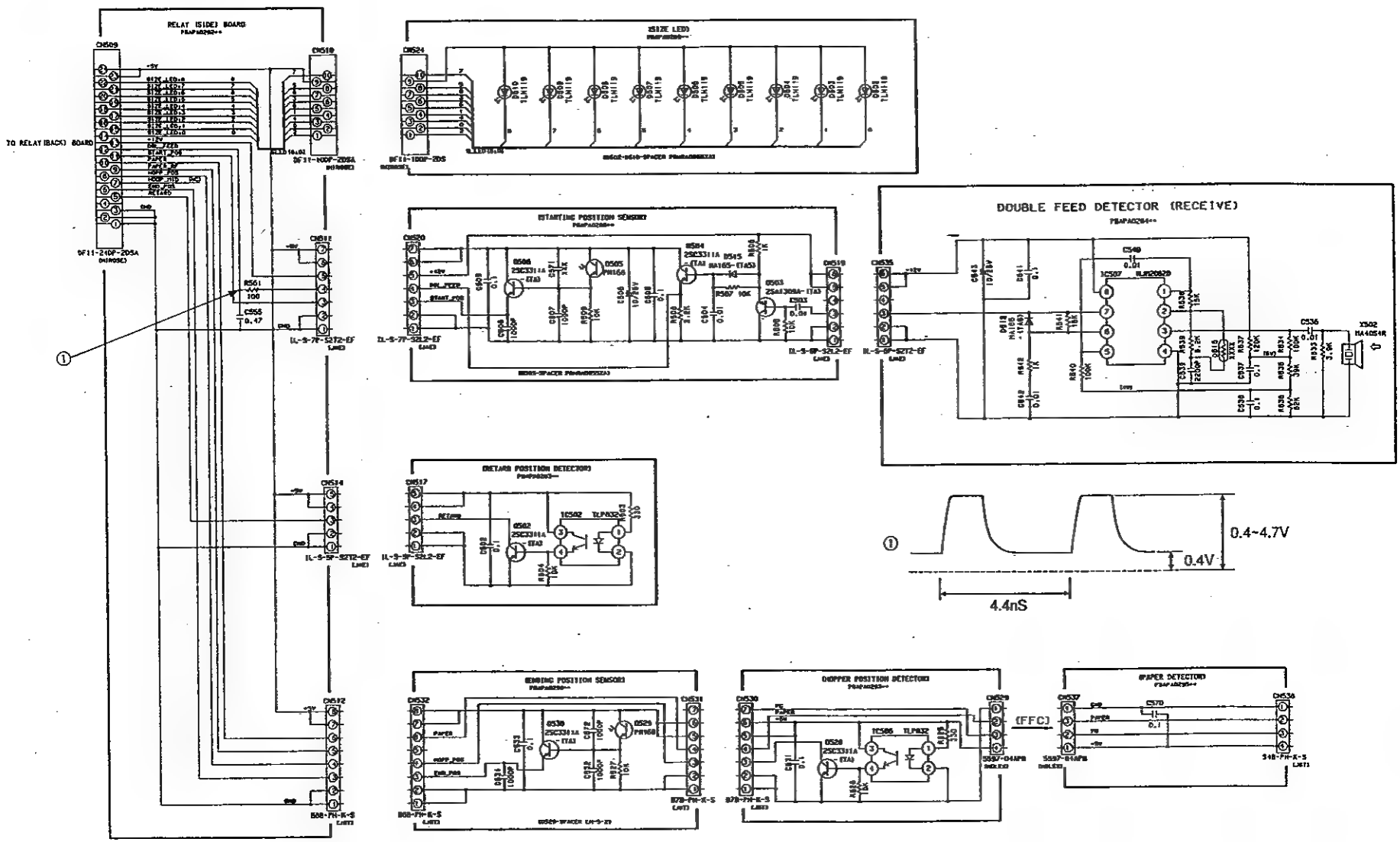


13.8 RELAY (BACK) Board



32

13.9 RELAY (SIDE) Board



SECTION 14
PARTS LOCATION AND MECHANICAL PARTS LIST

Important Safety Notice

Components identified by ⚠ mark in the Remark column have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

14.1 Exterior ..... 14 – 2

14.2 Hopper Unit ..... 14 – 4

14.3 Chassis ..... 14 – 6

14.4 Power Unit ..... 14 – 8

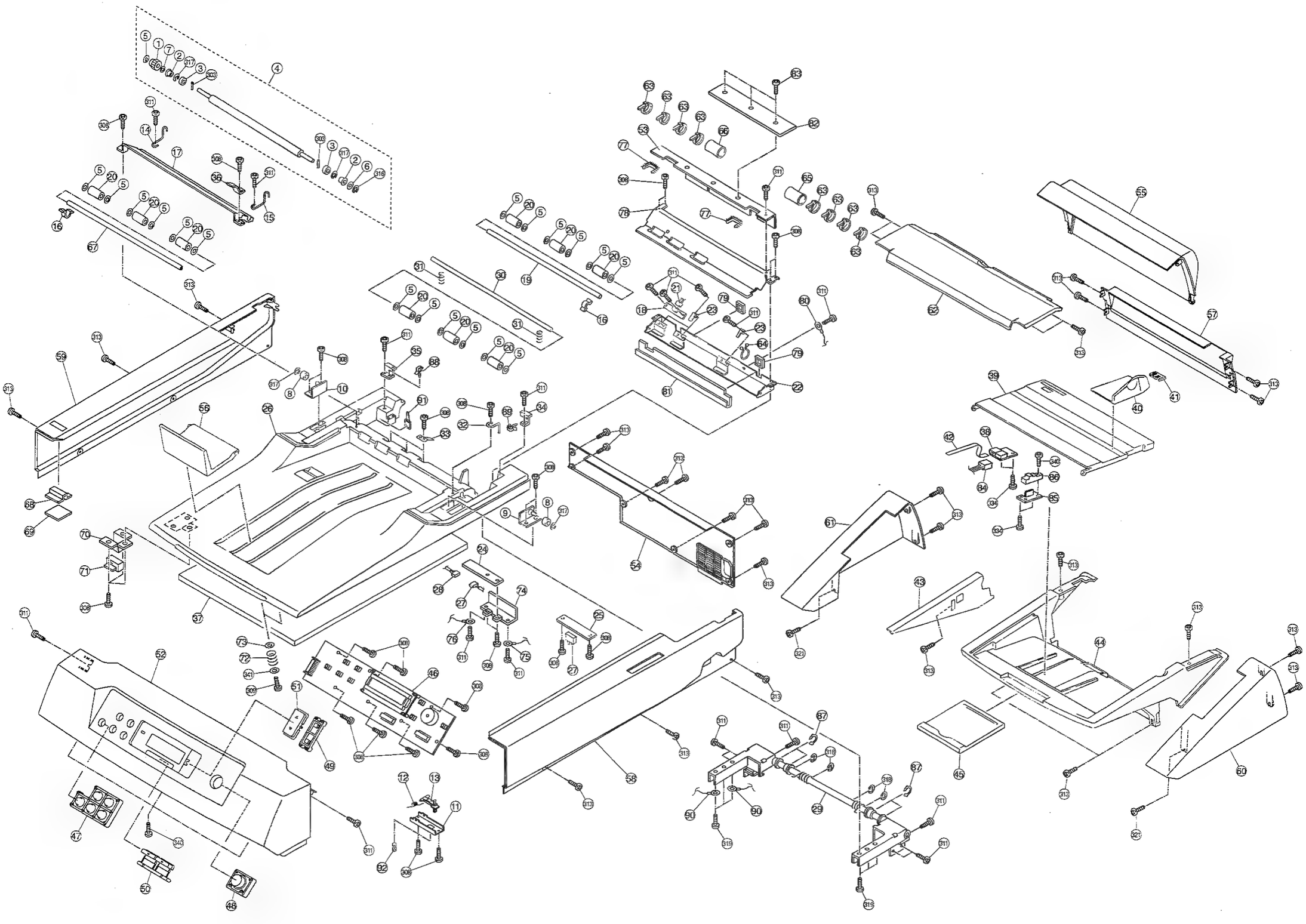
14.5 Packing ..... 14 – 10

Note: RTL (Retention Time Limited)

The marking (RTL) in the Remark column indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention.

After the end of this period, the assembly will no longer be available.

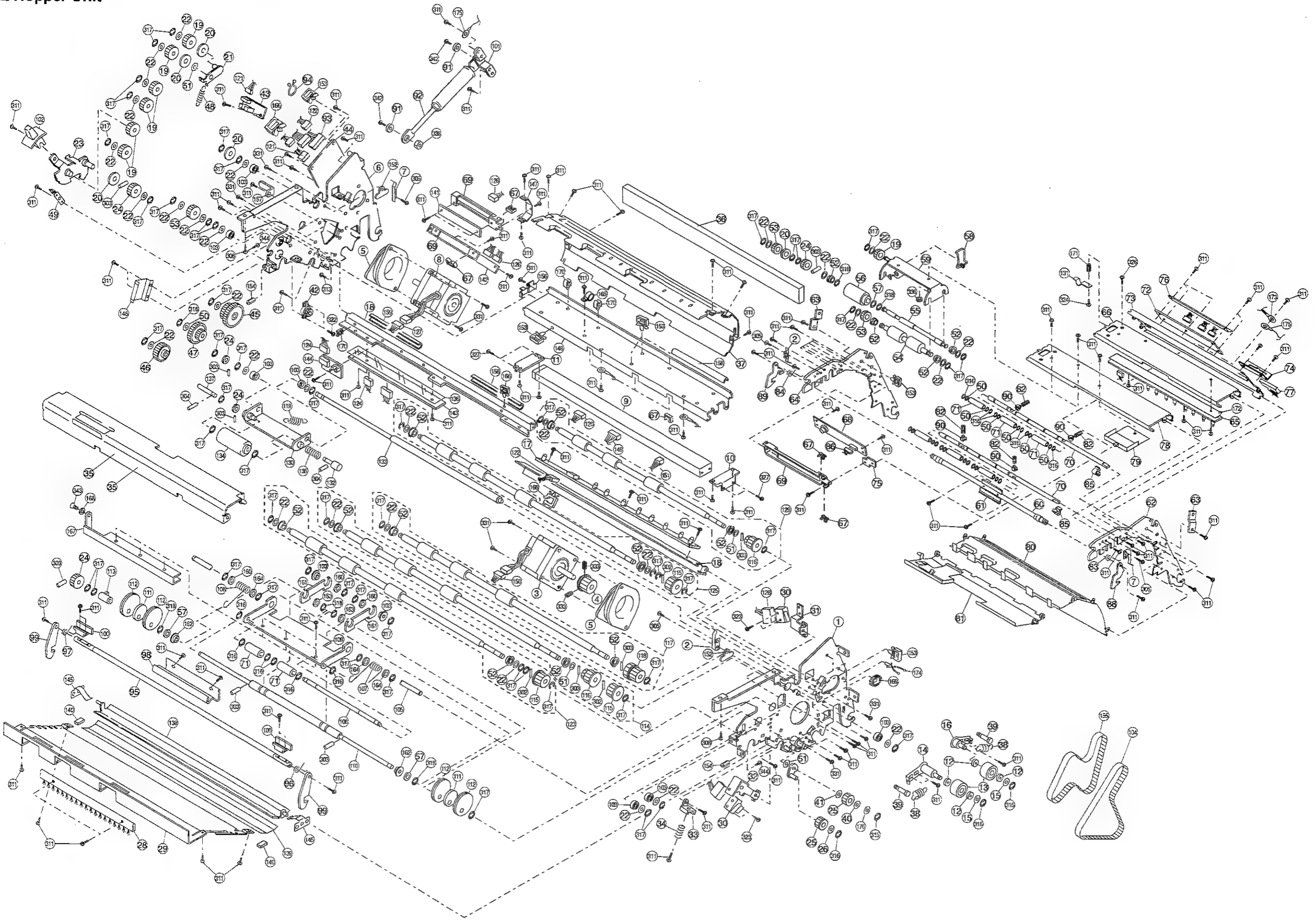
14.1 Exterior



REPLACEMENT MECHANICAL PARTS LIST (Exterior)

Ref No.	Parts No.	Description	ISO Code	Q'ty	Remark
1	PBDGA0061Z	Gear for KV-S6045 series		1	
2	PBDJA0020Z	Spacer for KV-S6045 series		2	
3	PBDRA0073Z	Roller for KV-S6045 series		2	
4	PBDRA0086Z-J	CIS Platen Roller		1	
5	PJNW4111Z	Spacer for KV-S6045 series		18	
E	PJNW4111Z	Spacer for KV-S6040 series		1	
6	RWPS5-025	Spacer for KV-S6045 series		1	
7	RWPS5-100	Spacer for KV-S6045 series		1	
8	PBDEA0154Z	Collar		2	
9	PBMDX0501Z	Inside Cover Lock Fitting Plate (R)		1	
10	PBMDX0502Z	Inside Cover Lock Fitting Plate (L)		1	
11	PBMDA0489Z	Actuator Fitting Plate		1	
12	PJDSA0052Z	Arm Spring		1	
13	PJHRA0247Y	Open Sensor Actuator		1	
14	PBDSA0118Z	Platen Roller Spring for KV-S6045 series		1	
15	PBDSA0119Z	Platen Roller Spring for KV-S6045 series		1	
16	PBHRA0181Z	Spacer		2	
17	PBUEA0112Z	Conveyor 1 for KV-S6045 series		1	
18	PBAPX2876045	STARTING LED Board		1	(RTL)
19	PBDFA0129Z	Free Roller Shaft		1	
20	PBDRA0029Z	Roller		9	
21	PBJEA0506Z	Cable (CN515-CN518)		1	
22	PBMDX0483Z	Free Roller Fitting Plate		1	
23	PBUSA0044Z	Free Roller Spring		2	
24	PBAPX2916045	ENDING LED Board		1	(RTL)
25	PBAPX2976045	DOCUMENT COVER Board		1	(RTL)
26	PBHAA0037Z-J	Flat Bed Cover		1	
27	PBJEA0507Z	Cable (CN526-CN527)		2	
28	PBJEA0508Z	Cable (CN513-CN525)		1	
29	PBUEA0125Z	FB Cover Hinge		1	
30	PBDFA0131Z	Free Roller Shaft		1	
31	PBDSA0114Z	Free Roller Spring		2	
32	PBDSA0120Z	Stopper Spring		1	
33	PBUSA0045Z	Free Roller Spring 2		1	
34	PBMDA0553Z	Clamp Fitting Plate (R)		1	
35	PBMDA0554Z	Clamp Fitting Plate (L)		1	
36	PBMDA0550Z	Plate		1	
37	PBHEA0102Z-J	Flat Bed		1	
38	PBAPX2956045	DOCUMENT DETECTOR Board		1	(RTL)
39	PBKZA0009Z-J	Hopper Plate		1	
40	PBKEA0104Z-J	Exit Guide		1	
41	PBHRA0199Z	Paper Guide Plate		1	
42	PBJEA0503Y	Cable (CN529-CN537)		1	
43	PBULA0150Z-J	Manuscript Side Plate		1	
44	PBKMA0060Z-J	Hopper Base		1	
45	PBKMA0049Z	Tray (Extend Hopper)		1	
46	PBAPX2806045	PANEL Board		1	(RTL)
47	PBBCA0010Z	Hinge Button (A)		1	
48	PBBCA0011Z	Hinge Button (B)		1	
49	PBBCA0012Z	Hinge Button (C)		1	
50	PBBCA0013Z	Hinge Button (D)		1	
51	PBBCA0014Z	Seesaw Button		1	
52	PBKMA0055Z-J	Front Cover for KV-S6045 series		1	
52	PBKMA0055Y-J	Front Cover for KV-S6040 series		1	
53	PBHMA0163Z	Cable Cover 1		1	
54	PBKFA0021Z-J	FB Rear Cover for KV-S6045 series		1	
54	PBKFA0021Z-J1	FB Rear Cover for KV-S6040 series		1	
55	PBKEA0103Z	Imprinter Door		1	
56	PBKEA0105Z	Stopper Panel		1	
57	PBKFA0022Z	ADF Rear Cover		1	
58	PBKMA0056Z	FB Rear Cover (R)		1	
59	PBKMA0057Z	FB Rear Cover (L)		1	
60	PBKMA0058Z-J	ADF Side Cover (R)		1	
61	PBKMA0059Z	ADF Side Cover (L)		1	
62	PBKMA0061Z-J	ADF Top Cover		1	
63	KI-100M	Clamper		2	
64	TMM6463	Clamper		1	
65	PBMXA0048Z	Isolation Tube		1	
66	PBMXA0049Z	Isolation Tube		1	
67	PBDFA0130Z	Free Roller Shaft		1	
68	PBUEA0143Z	Plate		1	
69	PBHEA0164Z	Sheet		1	
70	PBMDA0571Z	Plate		1	
71	SM-108S	Magnet		1	
72	PBDSA0138Z	Spring		1	
73	CC-0612-10	Spacer		1	
74	PBUEA0145Z	Plate		1	
75	PBJEA0620Z	Earth Cable		1	
76	PBJEA0623Z	Earth Cable		1	
77	KG-010-L44	Bushing		2	
78	PBUEA0113Z	Conveyor		1	
79	EDS-17L	Edge Saddle		2	
80	PBJEA0612Z	Earth Cable		1	
81	PBMXA0042Z	Sheet		1	
82	PBMXA0051Z	Sheet		1	
83	NRP-335	Rivet		3	
84	PBJEA0624Z	Cable		1	
85	PBMDA0573Z	Plate		1	
86	GP2A25	Photo Interrupter		1	
87	PBUSA0054Z	Spring		4	
88	LWS-3S	Clamper		1	
89	LWS-1S	Edge Saddle		1	
90	CS-2	Earth Cable		2	
91	K-103G	Clamper		1	
92	SJ-5012	Rubber Foot		1	
93	PBUEA0126Z	Conveyor		1	
303	XPJ2C10VW	Pin		2	
308	XTW3+10PFX	Screw		28	
309	XTW3+12PFX	Screw		2	
311	XTW3+6LFX	Screw		21	
313	XTW3+8LFY	Screw		30	
316	XUC4FY	E-ring		1	
317	XUC5FY	E-ring		2	
318	XUC6FY	E-ring		4	
319	XTV3+14GFX	Screw		6	
321	XSN3+6FX	Screw		2	
334	XTW3+8PFX	Screw		2	
340	XTB3+6FFY	Screw		3	
341	XWG32F10FX	Washer		2	

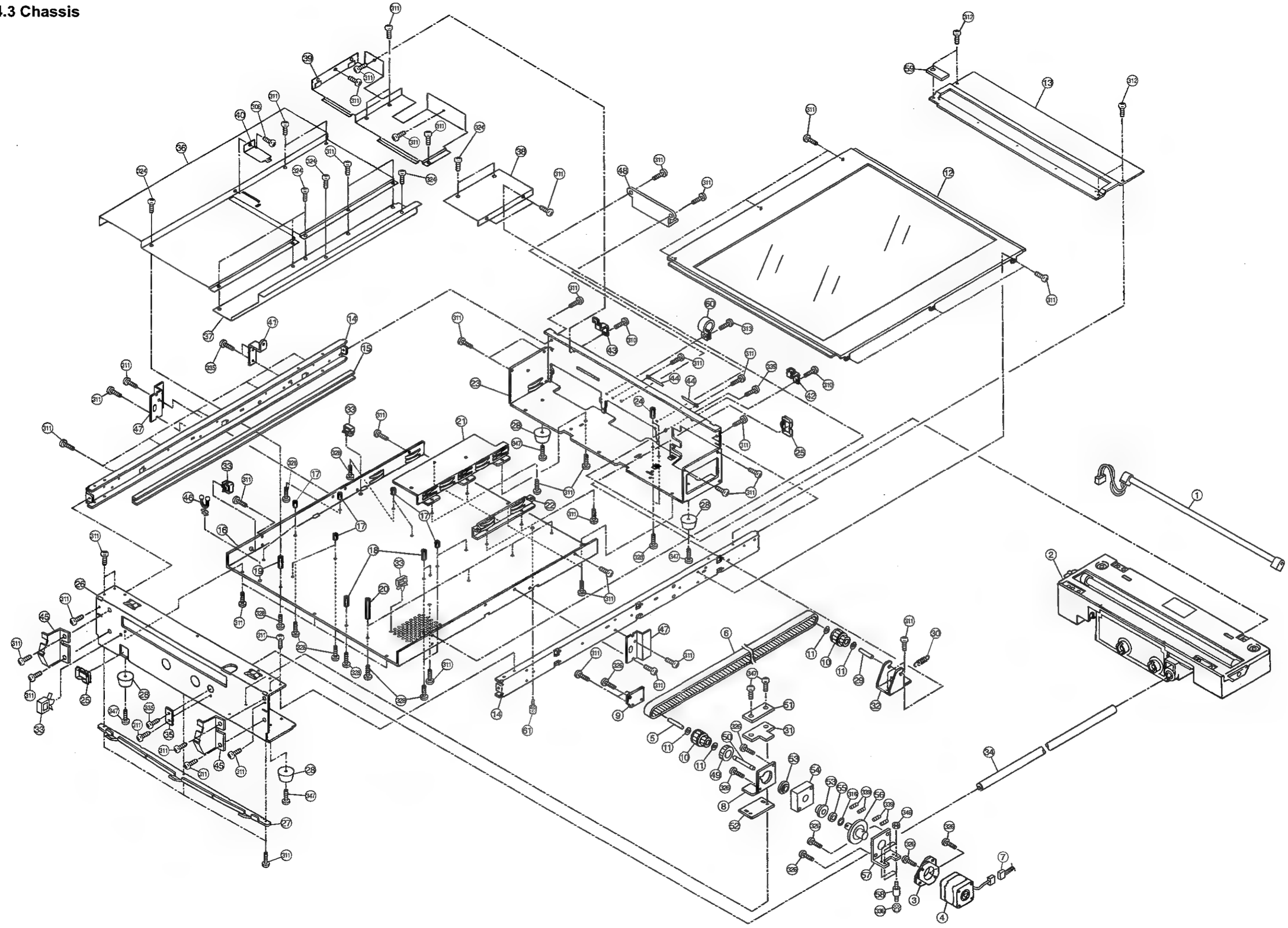
14.2 Hopper Unit



REPLACEMENT MECHANICAL PARTS LIST (Hopper Unit)

Ref No.	Parts No.	Description	ISO Code	Q'ty	Remark
1	PBUAX0121Z	Inside Cover Chassis (R)		1	
2	PBDSA0079Z	Lock Spring		2	
3	23KM-K711-05	Stepping Motor		1	
4	PBDGA0060Z	Pulley		1	
5	PBHE28Z	Damper		2	
6	PBUAX0122Z	Inside Cover Chassis (L)		1	
7	PBDSA0080Z	Lock Spring		2	
8	23KM-K035-G2	Paper Feed Motor		1	
9	EQ4R300Q1	CIS for KV-S6045 Series		1	
10	PBMDA0457Z	Plate for KV-S6045 Series		1	
11	PBMDA0458Z	Plate for KV-S6045 Series		1	
12	DDL-850ZZH	Ball Bearing		4	
13	PBDRA0074Z	Roller		2	
14	PBDEX0133Z	Tension Plate		1	
15	RWPS5-10025	Spacer		2	
16	PBDEX0132Z	Tension Plate		1	
17	PBAPX2896045	SIZE LED Board		1	(RTL)
18	PBULA0140Z	Reinforcement Plate 1		2	
19	PBDGA0018Z	Gear		7	
20	PBDGA0071Z	Pitch Roller		5	
21	PBUEX0114Z	Paper Feed Planetary Plate		1	
22	RWPS6-025	Spacer		29	
23	PBUEX0115Z	Retard Planetary Plate		1	
24	PBDGA0038Z	Gear		2	
25	PBDGA0062Z	Gear		2	
26	PBDRA0076Z	Roller		1	
27	PBUEX0116Z	Conveyor Planetary Plate		1	
28	PBMEA0057Z	Dischage Brush		1	
29	PBUEA0110Z	Exit Conveyor		1	
30	AVM38153	Micro Switch		2	
31	PBMDA0486Z	Fitting Plate 2		1	
32	PBMDA0493Z	Switching Fitting Plate		1	
33	PBMDA0549Z	Fitting Plate		1	
34	PBDSA0135Z	Inside Cover Spring		1	
35	PBUEX0109Z-J	Retard Roller Assembly		1	
36	PBHRA0150Z-J	Felt		1	
37	PBUVX0028Z	Inside Cover		1	
38	PBDS10Z40	Spring		2	
39	PBHDA0001Z	Screw		2	
40	RWPS4-025	Spacer		1	
41	RWPS4-050	Spacer		1	
42	NF-058E	Oil Damper		1	
43	PBAPX2836045	RETARD POSITION Board		1	(RTL)
44	PBAPX2926045	RELAY(SIDE) Board		1	(RTL)
45	PBDGA0028Z	Intermediate Gear		1	
46	PBDGA0030Z	Gear		1	
47	PBDGA0033Y	Gear		1	
48	PBDSA0111Z	Paper Feed Spring		1	
49	PBUSA0046Z	Retard Change Spring		1	
50	RWPS5-025	Spacer		7	
51	RWPS6-100	Spacer		3	
52	FFLAWBC612ZZ	Ball Bearing		14	
53	PBDGA0013Z	Gear		2	
54	PBDRA0081Z	Paper Feed Roller		1	
55	PBDFA0132Z	Roller Shaft		1	
56	PBDRA0065Z	Roller		1	
57	RWPS8-025	Spacer		1	
58	PBDSA0110Z	Roller Spring		1	
59	PBMDX0484Z	Feed Unit Fitting Plate		1	
60	PBDFA0136Z	Switching Shaft		1	
61	PBUL30Z	Plate		1	
62	PBUAX0123Z	Outside Cover Chassis (R)		1	
63	PBUSA0047Z	Imprinter Door Lock Spring		2	
64	PBUAX0124Z	Outside Cover Chassis (L)		1	
65	PBAPX2886045	SIZE SENSOR Board		1	(RTL)
66	PBULX0137Y	Reinforcement Plate (Upper) 2		1	
67	EDS-0607M	Edge Saddle		2	
68	PBAPX2856045	DOUBLE FEED DETECTOR (G) Board		1	(RTL)
69	PBMDA0487Z	Fitting Plate		3	
70	PBDFA0129Z	Free Roller Shaft		2	
71	PBDRA0029Z	Roller		5	
72	PBAPX2996045	RELAY (REAR) Board		1	(RTL)
73	PBULX0137Z	Reinforcement Plate Upper) 1		1	
74	PBULA0149Z	Imprinter Fitting Plate		1	
75	PBMDA0547Z	Sensor Plate 1		1	
76	PBHEA0150Z	Protection Sheet		1	
77	PBJEA0494Z	Cable (CN503-Imprinter)		1	
78	PBULA0137Y	Reinforcement Plate (Upper) 2		1	
79	PBHMA0165Z	Switching Cover		1	
80	PBUVA0029Z-J	Soft Cover Assemble		1	
81	PBUEX0111Z-J	Paper Feed Conveyor Assembly		1	
82	PBDSA0114Z	Free Roller Spring		4	
83	PBDSA0116Z	Spring		1	
84	PBDSA0117Z	Spring		1	
85	PBHRA0181Z	Spacer		2	
86	PBJEA0495Z	Cable (CN502-CN534)		1	
87	PBJEA0497Z	Cable (CN521-CN522)		1	
88	PBULA0143Z	Lever Switching Cover (R)		1	
89	PBULA0144Z	Lever Switching Cover (L)		1	
90	PJDJA0016Z	Roller Bear		4	
91	PBHMA0106Z	Spacer		2	
92	Y0009	Damper		1	
93	PBJEA0509Z	Cable (Relay(c))		1	
94	TMM6463	Clamper		1	
95	PBDFA0137Z	Shaft		1	
96	PBDSA0127Z	Lever Spring		1	
97	PBDSA0128Z	Lever Spring		1	
98	PBULA0145Z	Lock Release Plate		1	
99	PBULA0151Z	Lock Lever		2	
100	PBULA0147Z	Lock Stopper		2	
101	PBULA0148Z	Gas Damper Fitting Plate		1	
102	PBBSA0002Z	Retard Cancel Lever		1	
103	B-F6-171	Spacer		9	
104	80S2M334GB	Conveyor Belt		1	
105	PBDFA0126Z	Hopper Shaft		1	
106	PBDFA0135Z	Hopper Shaft		1	
107	PBDSA0107Z	Hopper Spring		1	
108	PBDSA0108Z	Hopper Spring		1	
109	PBMDA0500Z	Hopper Pressure Plate		1	
110	PBDFA0127Z	Hopper Cam Shaft		1	
111	PBDGA0068Z	Hopper Cam		2	
112	PBDGA0069Z	Hopper Cam Fringe		4	
113	PBHRA0023Z	Shutter		1	
114	PBDRA0084Z	Drive Roller		3	
115	PBUDA0036Z	Drive Pulley		3	
116	PBDGA0058Z	Gear		2	
117	PBDRA0085Z	Drive Roller		2	
118	PBDGA0059Z	Gear		1	
119	PBDSA0112Z	Retard Spring		1	
120	PBJEA0498Y	Cable (CIS 8P) for KV-S6045 Series		1	
121	PBJEA0499Z	Cable (CN514-CN517)		2	
122	PBJEA0500Z	Cable (CN510-CN524)		2	
123	PBJEA0501Z	Cable (CN512-CN532)		2	
124	PBJEA0502Z	Cable (CN530-CN531)		2	
125	PBJEA0504Z	Cable (CN511-CN520)		2	
126	PBJEA0505Z	Cable (CN519-CN535)		2	
127	PBJEA0522Z	Cable (Paper Feed Motor)		1	
128	PBJEA0523Z	Cable (ADF Switch)		1	
129	PBJEA0524Z	Cable (ADF Conveyor Switch)		1	
130	PBMDX0485Z-J	Retard Fitting Plate		1	
132	PBDEA0117Z	Pin		1	
133	PBDFA0128Z	Retard Drive Shaft		1	
134	PBDRA0083Z	Retard Roller		1	
135	PBDSA0102Z	Spring		1	
136	PBHEA0172Z	Sheet		1	
137	PBDEA0125Z	Retard Shaft 2		1	
138	PBUEX0117Z	White Standard Conveyor		1	
139	PBHEA0103Z	ADF White Standard Sheet		1	
140	PBHEA0123Z	Sheet		2	
141	PBAPX2846045	DOUBLE FEED DETECTOR (R) Board		1	(RTL)
142	PBAPX2866045	STARTING POSITION SENSOR Board		1	(RTL)
143	PBAPX2906045	ENDING SENSOR Board		1	(RTL)
144	PBAPX2936045	HOPPER POSITION Board		1	(RTL)
145	PBUSA0043Z	Conveyor Spring		2	
146	PBHMA0164Z	Cable Cover 2		1	
147	PBMDA0548Z	Sensor Plate 2		1	
148	PBULA0141Z	Reinforcement Plate 2		1	
149	PBJEA0510Y	Cable (CIS 10) for KV-S6045 Series		1	
150	PBJEA0517Z	Cable (Conveyor Motor)		1	
151	PBJEA0529Z	Cable (CIS LED) for KV-S6045 Series		1	
152	PBMDA0551Z	Plate		2	
153	LWS-1S	Edge Saddle		5	
154	ASB-310	Spacer		2	
155	80S2M318GB	Flat Belt		1	
156	PBMDA0574Z	Plate		1	
157	PBUEA0106Z	Plate		1	
158	CE012-L100	Edging		1	
159	CE012-L70	Edging		1	
160	CC-0613-15	Spacer		3	
161	PBMEA0059Z	Plate		2	
162	F-FLAW678AZZ	Ball Bearing		1	
163	CC-0816-15	Spacer		2	
164	RWPS6-050	Spacer		3	
165	FGC-8	Clamper		1	
166	LWS-3S	Clamper		3	
167	PBMDA0570Z	Plate		1	
168	SWD-05	Spacer		1	
169	KG-032-L56	Bushing		1	
170	UAMS-05SN-W	Bushing		3	
171	ASB-315	Spacer		1	
172	PBHEA0155Z	Sheet		1	
173	CS-2	Clip		2	
174	TMM764301	Clamper		1	
175	PBJEA0613Z	Cable		2	
176	RWPS4-013	Spacer		1	
177	PBUEA0130Z	Conveyor		1	
302	XPJ2C12VW	Pin		3	
303	XPJ2C10VW	PinP		8	
304	XPL2B12WVW	Pin		2	
305	XTB3+6FFX	Screw		4	
308	XTW3+10PFX	Screw			
311	XTW3+6LFX	Screw		76	
313	XTW3+8LFX	Screw		1	
315	XUC3FY	E-ring		15	
316	XUC4FY	E-ring		18	
317	XUC5FY	E-ring		43	
318	XUC6FY	E-ring		4	
320	XWG6	Washer		2	
322	XYN2+J6FX	Screw		1	
323	XYN23+J10FX	Screw		2	
327	XYN26+J6FX	Screw		4	
331	XYN4+J10FXS	Screw		4	
333	XXE3F6FP	Screw		2	
336	XNA3FX	Nut		1	
338	XNG4BS	Nut		1	
342	XYN4+F12FY	Screw		2	
343	XSS5+8FX	Screw		1	
344	XYN3+J6FX	Screw		2	

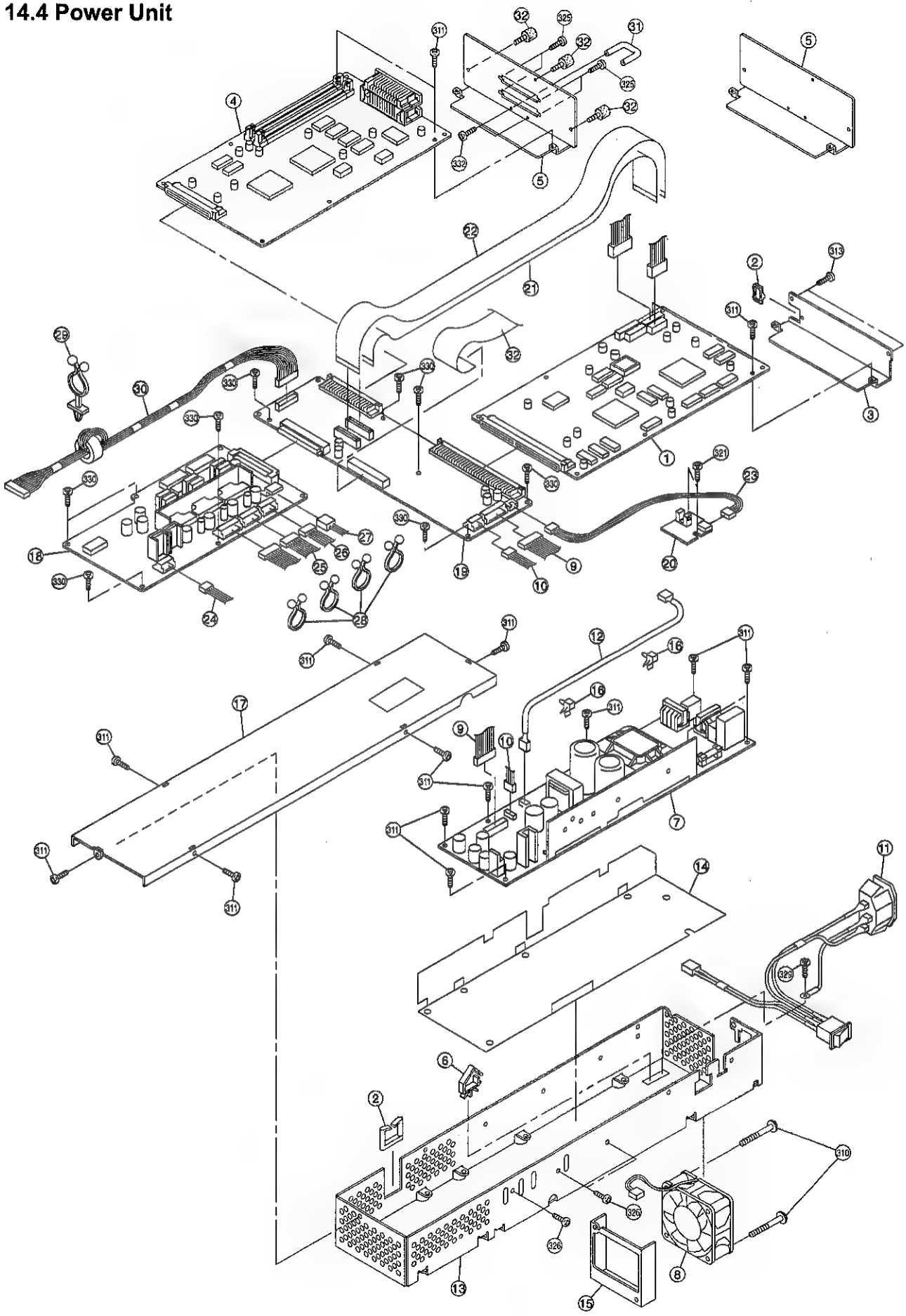
14.3 Chassis



REPLACEMENT MECHANICAL PARTS LIST (Chassis)

Ref No.	Part No.	Description	ISO Code	Q'ty	Remark
1	CFX12AYG/36H	Lamp Holder		1	
2	PBHAA0036Z-J	Carriage Unit		1	
3	MSP31-X60	Carriage Motor Mount		1	
4	103H549-0441	Carriage Motor		1	
5	PBDFA0113Z	Timing Pulley Shaft		1	
6	100S2M1224GB	Timing Belt		1	
7	PBJEA0521Z	Cable (CN361-Carriage Motor)		1	
8	PBMDA0476Z	Fitting Plate		1	
9	PBMDA0498Z	Timing Pulley Fitting Plate		1	
10	PBUDA0034Z	Timinng Pulley		2	
11	RWPS6-050	Spacer		4	
12	PBHEA0092Z-J	FB Glass Base Assembly		1	
13	PBHEA0093Z-J	ADF Glass Base Assembly		1	
14	PBUAA0119Z	Side Frame		2	
15	PBUEA0105Z	Carriage Guide Rail		1	
16	PBUAA0120Z	Bottom Frame		1	
17	ASB-310	Spacer		9	
18	ASB-318	Spacer		3	
19	ASB-322	Spacer		1	
20	ASB-340	Spacer		4	
21	PBUEA0107Z	PCB Guide Rail (A)		1	
22	PBUEA0108Z	PCB Guide Rail (B)		1	
23	PBUAA0118Z	Rear Frame		1	
24	ASB-317	Spacer		2	
25	EDS-1717U	Edge Saddle		2	
26	PBUAA0117Z	Front Frame		1	
27	PBMDA0497Z	Front Cover Fitting Plate		1	
28	C-30-RK-29	Rubber Foot		4	
29	PBDFA0114Z	Tension Pulley Shaft		1	
30	PBDSA0105Z	Tension Spring		1	
31	PBHGA0055Z	Rubber		1	
32	PBMDA0477Z	CIS Fitting Plate (L)		1	
33	LWS-18	Edge Saddle		3	
34	PBDFA0112Z	Carriage Shaft		1	
35	PBMDA0478Z	CIS Fitting Plate (R)		1	
36	PBMCA0093Z	Shield Cover (A)		1	
37	PBMCA0094Z	Shield Cover (B)		1	
38	PBMCA0096Z	Shield Cover (C)		1	
39	PBMCA0098Z	Shield Cover (D)		1	
40	PBHMA0157Z	Plate		1	
41	PBUEA0118Z	Inside Cover Holding Plate		1	
42	PBHMA0166Z	Stopper Spring (R)		1	
43	PBHMA0167Z	Stopper Spring (L)		1	
44	CS-2	Clip		2	
45	PBUEA0147Z	Plate		1	
46	NF-1862-V0	Clamper		1	
47	PBUEA0146Z	Plate		1	
48	PBMDA0561Z	Plate		1	
49	PBDGA0083Z	Gear		1	
50	PBDFA0175Z	Shaft		1	
51	PBMDA0577Z	Plate		1	
52	PBHGA0067Z	Rubber		1	
53	FFLAWBC510ZZ	Ball Bearing		2	
54	PBMEA0058Z	Shaft Holder		1	
55	RWPS5-050	Spacer		1	
56	DCM-4236A35	Damper Coupling		1	
57	PBMDA0576Z	Plate		1	
58	RS7016	Mount		1	
59	PBHEA0160Z	Sheet		1	
60	AL5	Clamper		1	
306	XTN4+6FFX	Screw		1	
310	XTS3+8FFX	Screw		2	
311	XTW3+6LFX	Screw		61	
312	XTW3+6LFZ	Screw		4	
313	XTW3+8LFY	Screw		6	
316	XUC4FY	E-ring		1	
324	XYN3+B6FX	Screw		8	
326	XYN3+F6FX	Screw		5	
328	XYN3+C6FX	Screw		19	
335	XYN4+F8FX	Screw		2	
336	XNA3FX	Nut		1	
339	XXE3F3FPS	Screw		2	
346	XNG3BFX	Nut		1	
347	XTW3+10LFX	Screw		4	

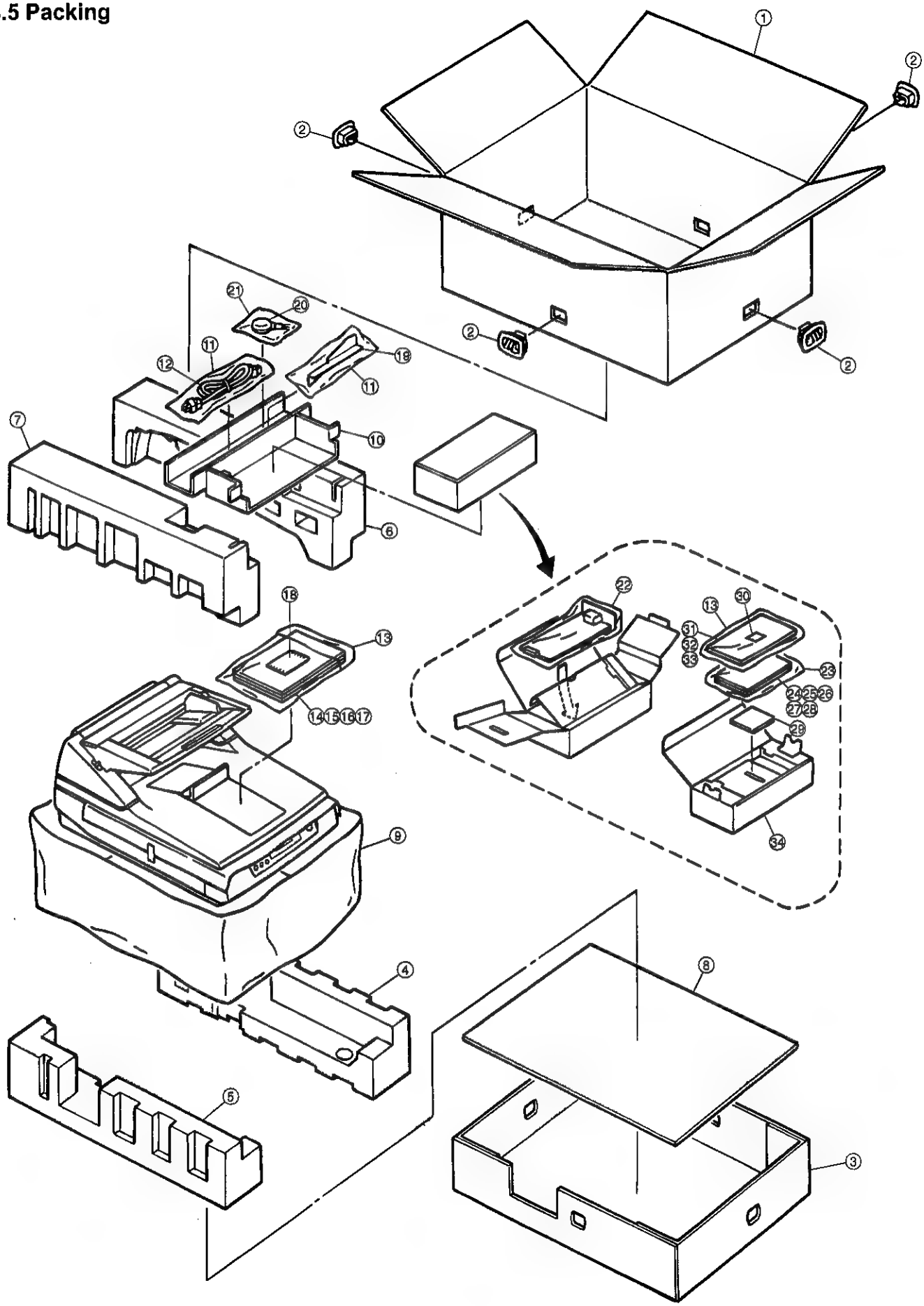
14.4 Power Unit



REPLACEMENT MECHANICAL PARTS LIST (Power Unit)

Ref No.	Part No.	Description	ISO Code	Q'ty	Remark
1	PBAPX257255B	MAIN CONTROL Board		1	(RTL)
2	EDS-1208U	Edge Saddle		2	
3	PBMDA0481Z	Fitting Plate		1	
4	PBAPX258255A	SCSI Board		1	(RTL)
5	PBMDA0499Z-J	SCSI Board Fitting Plate		1	
5	PBUEA0144Z	SCSI Board Fitting Plate		1	
6	LWS1SV0BK	Edge Saddle		1	
7	PBAPX3276045	POWER Board		1	(RTL)
8	PBJEA0090Z	Fan		1	
9	PBJEA0525Z	Cable (+5V)		2	
10	PBJEA0526Z	Cable (+24V)		2	
11	PBJEA0528Y	Cable (AC Inlet)		1	
12	PBJEA0611Z	Cable (DC Fan Relay)		1	
13	PBMDA0482Z	Bracket		1	
14	PBMXA0040Z	POWER Board Sheet		1	
15	PBUVA0027Z	Fan Cover		1	
16	YMC10-0	Clamp		2	
17	PBMCA0092Z-J	Shield Cover		1	
18	PBAPX2606045	DRIVE Board		1	(RTL)
19	PBAPX2796045	MOTHER Board		1	(RTL)
20	PBAPX2816045	CARRIAGE HOME SENSOR Board		1	(RTL)
21	PBJEA0511Y-J	Cable (CN501-CN2010)		1	
22	PBJEA0512Y-J	Cable (CN504-CN2009)		1	
23	PBJEA0514Z	Cable (CN516-CN2011)		1	
24	PBJEA0516Z	Cable (CN327-CIS)		1	
25	PBJEA0518Z	Cable (CN351)		1	
26	PBJEA0519Z	Cable (CN341)		1	
27	PBJEA0520Z	Cable (CN332)		1	
28	TMM6463	Clamper		4	
29	NF-1862-V0	Clamper		1	
30	PBJEA0515Z	Cable (CN536-CN2007)		1	
31	A-46-5	Handle		1	
32	PBHDA0006Y	Cable (CCD Flexible)		1	
310	XTW3+30LFX	Screw		2	
311	XTW3+6LFX	Screw		15	
313	XTW3+8LFY	Screw		3	
321	XSN3+6FX	Screw		2	
325	XSN25+4FX	Screw		4	
326	XYN3+F6FX	Screw		3	
329	XYN4+C8FX	Screw		1	
330	XYN3+B6FX	Screw		9	
332	XSB26+4FX	Screw		2	

14.5 Packing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REPLACEMENT MECHANICAL PARTS LIST (Packing)

Ref No.	Part No.	Description	ISO Code	Q'ty	Remark
1	PBPGA0338Z	Outer Carton for KV-S6045W		1	
1	PBPGA0341Z	Outer Carton for KV-S6040W		1	
2	HP-601W2	Joint		4	
3	PBPGA0339Z	Carton		1	
4	PBPQA0110Z	Cushion		1	
5	PBPQA0111Z	Cushion		1	
6	PBPQA0113Z	Cushion (R)		1	
7	PBPQA0114Z	Cushion (L)		1	
8	PAPNA0244Z	Bottom Pad		1	
9	PBPPA0025Z	Cover		1	
10	PBPNA0242Z	Parts Box		1	
11	XZB13X30A04	Cover		2	
12	PBJEA0070Z	AC Cord		1	
13	XZB25X40A04R	Cover for Manual		2	
14	PBQX50233Y	Operation Manual		1	
15	PBQX50234Y	Installation Manual		1	
16	PBQX50235Y	Maintenance Manual		1	
17	PBQX70014Z	Warranty Card		1	
18	PBHSA0055Z	Cleaning Paper		1	
19	PBMDA0575Z-J	Hopper Attachement		1	
20	PBHEA0142Z	Blower		1	
21	ZPFG88AU0A	Blower		1	
22	ZVC0XJ4021	Cover for SCSI Board		1	
23	XZB23X17A03	Cover for FD		1	
24	PBAQX01S46-J	FD with Software (ISIS)		1	
25	PBAQX02S43-J	FD with Software (PIXVIEW3.1(1))		1	
26	PBAQX03S43-J	FD with Software (PIXVIEW3.1(2))		1	
27	PBAQX04S43-J	FD with Software (PIXVIEW-NT(1))		1	
28	PBAQX05S43-J	FD with Software (PIXVIEW-NT(2))		1	
29	PBAQX02S46-J	FD with Software (TWAIN)		1	
30	PBQAA0173Z	Customer Label		1	
31	PBQX50238Z	Installation Manual		2	
32	PBQX90106Z	ISIS Installation Manual		1	
33	PBQX90107Z	TWAIN Installation Manual		1	
34	PBPGA0323Z	Carton Box		1	
	PBPNA0234ZA	Cushion		1	
	PBPNA0237ZA	Parts Box		1	

SECTION 15
REPLACEMENT PARTS LIST

Important Safety Notice

Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

Notes: RTL (Retention Time Limited)

The marking (RTL) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention.
After the end of this period, the assembly will no longer be available.

Unique Parts Indication

The marking (M) in the Ref. No. column indicates unique parts for KV-SS855.
The marking (U) in the Ref. No. column indicates unique parts for KV-SS855U.

Abbreviation of Part Name and Description

1. Resistor

Example:

ERJ6GEYJ472 C 4.7k, J, 1/10W
TYPE ALLOWANCE

TYPE	ALLOWANCE
C : Carbon	F : ±1%
F : Fuse	G : ±2%
M : Metal Oxide	J : ±5%
Metal Film	K : ±10%
S : Solid	M : ±20%
W : Wire Wound	

2. Capacitor

Example:

ECUX1H104ZFX C 0.1, Z, 50V
TYPE ALLOWANCE

TYPE	ALLOWANCE
C : Ceramic	C : ±0.25 pF
E : Electrolytic	D : ±0.5 pF
P : Polyester	F : ±1 pF
Polypropylene	J : ±5%
T : Tantalum	K : ±10%
	L : ±15%
	M : ±20%
	P : +100%, -0%
	Z : +80%, -20%

MAIN CONTROL Board

Ref No.	Part No.	Description
	RESISTORS	
R1001	ERJ6GEYJ181	C 180, J, 1/10W
R1002	ERJ3GEYJ561	C 560, J, 1/16W
R1003	ERJ6GEYJ181	C 180, J, 1/10W
R1004	ERJ3GEYJ561	C 560, J, 1/16W
R1005	ERJ3GEYJ472	C 4.7k, J, 1/16W
R1006	ERJ3GEYJ472	C 4.7k, J, 1/16W
R1007	ERJ3GEYJ223	C 22k, J, 1/16W
R1008	ERJ3GEYJ561	C 560, J, 1/16W
R1009	ERJ3GEYJ470	C 47, J, 1/16W
R1010	ERJ3GEYJ683	C 68k, J, 1/16W
R1011	ERJ3GEYJ333	C 33k, J, 1/16W
R1013	ERJ3GEYJ220	C 22, J, 1/16W
R1014	ERJ3GEYJ223	C 22k, J, 1/16W
R1041	ERJ6GEYJ181	C 180, J, 1/10W
R1042	ERJ3GEYJ561	C 560, J, 1/16W
R1043	ERJ6GEYJ181	C 180, J, 1/10W
R1044	ERJ3GEYJ561	C 560, J, 1/16W
R1047	ERJ3GEYJ223	C 22k, J, 1/16W
R1048	ERJ3GEYJ561	C 560, J, 1/16W
R1049	ERJ3GEYJ470	C 47, J, 1/16W
R1050	ERJ3GEYJ683	C 68k, J, 1/16W
R1051	ERJ3GEYJ333	C 33k, J, 1/16W
R1053	ERJ3GEYJ220	C 22, J, 1/16W
R1054	ERJ3GEYJ223	C 22k, J, 1/16W

Ref No.	Part No.	Description
R1055	ERJ3GEYJ272	C 2.7k, J, 1/16W
R1056	ERJ3GEYJ222	C 2.2k, J, 1/16W
R1057	ERJ3GEYJ222	C 2.2k, J, 1/16W
R1101	ERJ3GEYJ472	C 4.7k, J, 1/16W
R1102	ERJ3GEYJ220	C 22, J, 1/16W
R1103	ERJ3GEYJ220	C 22, J, 1/16W
R1104	ERJ3GEYJ220	C 22, J, 1/16W
R1105	ERJ3GEYJ103	C 10k, J, 1/16W
R1106	ERJ3GEYJ103	C 10k, J, 1/16W
R1107	ERJ3GEYJ103	C 10k, J, 1/16W
R1108	ERJ3GEYJ220	C 22, J, 1/16W
R1111	ERJ3GEYJ103	C 10k, J, 1/16W
R1112	ERJ3GEYJ103	C 10k, J, 1/16W
R1113	ERJ3GEYJ220	C 22, J, 1/16W
R1114	ERJ3GEYJ220	C 22, J, 1/16W
R1115	ERJ3GEYJ220	C 22, J, 1/16W
R1116	ERJ3GEYJ103	C 10k, J, 1/16W
R1117	ERJ3GEYJ103	C 10k, J, 1/16W
R1118	ERJ3GEYJ220	C 22, J, 1/16W
R1120	ERJ3GEYJ472	C 4.7k, J, 1/16W
R1121	ERJ3GEYJ472	C 4.7k, J, 1/16W
R1122	ERJ3GEYJ103	C 10k, J, 1/16W
R1123	ERJ3GEYJ103	C 10k, J, 1/16W
R1124	ERJ3GEYJ103	C 10k, J, 1/16W
R1125	ERJ3GEYJ103	C 10k, J, 1/16W

MAIN CONTROL Board (continued)

Ref No.	Part No.	Description
R1130	ERJ3GEYJ681	C 680, J, 1/16W
R1131	ERJ3GEYJ681	C 680, J, 1/16W
R1132	ERJ3GEYJ681	C 680, J, 1/16W
R1133	ERJ3GEYJ681	C 680, J, 1/16W
R1141	ERJ3GEYJ103	C 10k, J, 1/16W
R1142	ERJ3GEYJ103	C 10k, J, 1/16W
R1143	ERJ3GEYJ681	C 680, J, 1/16W
R1144	ERJ3GEYJ681	C 680, J, 1/16W
R1145	ERJ3GEYJ472	C 4.7k, J, 1/16W
R1146	ERJ3GEYJ472	C 4.7k, J, 1/16W
R1147	ERJ3GEYJ220	C 22, J, 1/16W
R1148	ERJ3GEYJ103	C 10k, J, 1/16W
R1149	ERJ3GEYJ101	C 100, J, 1/16W
R1150	ERJ3GEYJ103	C 10k, J, 1/16W
R1201	ERJ3GEYJ220	C 22, J, 1/16W
R1202	ERJ3GEYJ220	C 22, J, 1/16W
R1203	ERJ3GEYJ220	C 22, J, 1/16W
R1204	ERJ3GEYJ220	C 22, J, 1/16W
R1205	ERJ3GEYJ220	C 22, J, 1/16W
R1206	ERJ3GEYJ220	C 22, J, 1/16W
R1207	ERJ3GEYJ220	C 22, J, 1/16W
R1208	ERJ3GEYJ220	C 22, J, 1/16W
R1209	ERJ3GEYJ220	C 22, J, 1/16W
R1210	ERJ3GEYJ220	C 22, J, 1/16W
R1211	ERJ3GEYJ220	C 22, J, 1/16W
R1212	ERJ3GEYJ220	C 22, J, 1/16W
R1213	ERJ3GEYJ220	C 22, J, 1/16W
R1214	ERJ3GEYJ220	C 22, J, 1/16W
R1220	ERJ3GEYJ103	C 10k, J, 1/16W
R1221	ERJ3GEYJ103	C 10k, J, 1/16W
R1222	ERJ3GEYJ103	C 10k, J, 1/16W
R1223	ERJ3GEYJ103	C 10k, J, 1/16W
R1224	ERJ3GEYJ103	C 10k, J, 1/16W
R1225	ERJ3GEYJ103	C 10k, J, 1/16W
R1226	ERJ3GEYJ103	C 10k, J, 1/16W
R1227	ERJ3GEYJ103	C 10k, J, 1/16W
R1228	ERJ3GEYJ103	C 10k, J, 1/16W
R1229	ERJ3GEYJ103	C 10k, J, 1/16W
R1230	ERJ3GEYJ103	C 10k, J, 1/16W
R1231	ERJ3GEYJ103	C 10k, J, 1/16W
R1232	ERJ3GEYJ220	C 22, J, 1/16W
R1240	ERJ3GEYJ560	C 56, J, 1/16W
R1241	ERJ3GEYJ472	C 4.7k, J, 1/16W
R1242	ERJ3GEYJ560	C 56, J, 1/16W
R1245	ERJ3GEYJ220	C 22, J, 1/16W
R1246	ERJ3GEYJ220	C 22, J, 1/16W
R1247	ERJ3GEYJ220	C 22, J, 1/16W
R1248	ERJ3GEYJ220	C 22, J, 1/16W
R1249	ERJ3GEYJ220	C 22, J, 1/16W
R1250	ERJ3GEYJ220	C 22, J, 1/16W
R1251	ERJ3GEYJ220	C 22, J, 1/16W
R1252	ERJ3GEYJ220	C 22, J, 1/16W
R1253	ERJ3GEYJ220	C 22, J, 1/16W
R1254	ERJ3GEYJ220	C 22, J, 1/16W
R1255	ERJ3GEYJ220	C 22, J, 1/16W
R1256	ERJ3GEYJ220	C 22, J, 1/16W
R1257	ERJ3GEYJ220	C 22, J, 1/16W
R1258	ERJ3GEYJ220	C 22, J, 1/16W
R1259	ERJ3GEYJ220	C 22, J, 1/16W
R1271	ERJ3GEYJ103	C 10k, J, 1/16W
R1272	ERJ3GEYJ103	C 10k, J, 1/16W
R1273	ERJ3GEYJ103	C 10k, J, 1/16W
R1274	ERJ3GEYJ103	C 10k, J, 1/16W
R1275	ERJ3GEYJ103	C 10k, J, 1/16W
R1276	ERJ3GEYJ103	C 10k, J, 1/16W
R1277	ERJ3GEYJ103	C 10k, J, 1/16W
R1278	ERJ3GEYJ103	C 10k, J, 1/16W
R1279	ERJ3GEYJ103	C 10k, J, 1/16W
R1280	ERJ3GEYJ103	C 10k, J, 1/16W
R1281	ERJ3GEYJ103	C 10k, J, 1/16W
R1282	ERJ3GEYJ103	C 10k, J, 1/16W
R1283	ERJ3GEYJ560	C 56, J, 1/16W

Ref No.	Part No.	Description
J1202	ERJ3GEY0R00	0-ohm Jumper
J1203	ERJ3GEY0R00	0-ohm Jumper
J1205	ERJ3GEY0R00	0-ohm Jumper
J1207	ERJ3GEY0R00	0-ohm Jumper
Z1001	MNR14E0AJ220	Resistor Array
Z1002	MNR14E0AJ220	Resistor Array
Z1003	MNR14E0AJ220	Resistor Array
Z1004	MNR14E0AJ220	Resistor Array
Z1005	MNR14E0AJ220	Resistor Array
Z1006	MNR14E0AJ472	Resistor Array
Z1007	MNR14E0AJ220	Resistor Array
Z1008	MNR14E0AJ220	Resistor Array
Z1101	MNR14E0AJ472	Resistor Array
Z1102	MNR14E0AJ472	Resistor Array
Z1103	MNR14E0AJ332	Resistor Array
Z1104	MNR14E0AJ332	Resistor Array
Z1105	MNR14E0AJ472	Resistor Array
Z1106	MNR14E0AJ472	Resistor Array
Z1107	MNR14E0AJ472	Resistor Array
Z1108	MNR14E0AJ472	Resistor Array
Z1109	MNR14E0AJ103	Resistor Array
Z1110	MNR14E0AJ220	Resistor Array
Z1111	MNR14E0AJ220	Resistor Array
Z1112	MNR14E0AJ220	Resistor Array
Z1113	MNR14E0AJ220	Resistor Array
Z1114	MNR14E0AJ220	Resistor Array
Z1115	MNR14E0AJ220	Resistor Array
Z1116	MNR14E0AJ220	Resistor Array
Z1117	MNR14E0AJ220	Resistor Array
Z1118	MNR14E0AJ220	Resistor Array
Z1119	MNR14E0AJ220	Resistor Array
Z1120	MNR14E0AJ220	Resistor Array
Z1121	MNR14E0AJ220	Resistor Array
Z1122	MNR14E0AJ220	Resistor Array
Z1123	MNR14E0AJ103	Resistor Array
Z1124	MNR14E0AJ472	Resistor Array
Z1125	MNR14E0AJ472	Resistor Array
Z1126	MNR14E0AJ220	Resistor Array
Z1127	MNR14E0AJ220	Resistor Array
Z1128	MNR14E0AJ220	Resistor Array
Z1163	MNR14E0AJ220	Resistor Array
Z1164	MNR14E0AJ220	Resistor Array
Z1165	MNR14E0AJ103	Resistor Array
Z1166	MNR14E0AJ103	Resistor Array
Z1167	MNR14E0AJ472	Resistor Array
Z1201	MNR14E0AJ220	Resistor Array
Z1202	MNR14E0AJ220	Resistor Array
Z1203	MNR14E0AJ220	Resistor Array
Z1204	MNR14E0AJ220	Resistor Array
Z1205	MNR14E0AJ220	Resistor Array
Z1206	MNR14E0AJ220	Resistor Array
Z1207	MNR14E0AJ220	Resistor Array
Z1208	MNR14E0AJ220	Resistor Array
Z1209	MNR14E0AJ220	Resistor Array
Z1210	MNR14E0AJ220	Resistor Array
Z1211	MNR14E0AJ220	Resistor Array
Z1212	MNR14E0AJ220	Resistor Array
Z1213	MNR14E0AJ220	Resistor Array
Z1214	MNR14E0AJ220	Resistor Array
Z1215	MNR14E0AJ220	Resistor Array
Z1216	MNR14E0AJ220	Resistor Array
Z1217	MNR14E0AJ220	Resistor Array
Z1218	MNR14E0AJ220	Resistor Array
Z1219	MNR14E0AJ220	Resistor Array
Z1220	MNR14E0AJ220	Resistor Array
Z1221	MNR14E0AJ220	Resistor Array
Z1222	MNR14E0AJ220	Resistor Array
Z1223	MNR14E0AJ220	Resistor Array
Z1224	MNR14E0AJ220	Resistor Array
Z1225	MNR14E0AJ220	Resistor Array
Z1226	MNR14E0AJ220	Resistor Array
Z1227	MNR14E0AJ220	Resistor Array

MAIN CONTROL Board (continued)

Ref No.	Part No.	Description
Z1228	MNR14E0AJ220	Resistor Array
Z1229	MNR14E0AJ220	Resistor Array
Z1230	MNR14E0AJ220	Resistor Array
Z1231	MNR14E0AJ220	Resistor Array
Z1232	MNR14E0AJ220	Resistor Array
Z1233	MNR14E0AJ220	Resistor Array
Z1234	MNR14E0AJ220	Resistor Array
Z1235	MNR14E0AJ220	Resistor Array
Z1242	MNR14E0AJ220	Resistor Array
Z1243	MNR14E0AJ220	Resistor Array
Z1244	MNR14E0AJ220	Resistor Array
Z1245	MNR14E0AJ220	Resistor Array
Z1246	MNR14E0AJ220	Resistor Array
Z1247	MNR14E0AJ220	Resistor Array
Z1248	MNR14E0AJ220	Resistor Array
Z1249	MNR14E0AJ220	Resistor Array
Z1250	MNR14E0AJ220	Resistor Array
Z1251	MNR14E0AJ220	Resistor Array
Z1252	MNR14E0AJ220	Resistor Array
Z1253	MNR14E0AJ220	Resistor Array
Z1254	MNR14E0AJ220	Resistor Array
Z1255	MNR14E0AJ220	Resistor Array
Z1256	MNR14E0AJ220	Resistor Array
Z1257	MNR14E0AJ220	Resistor Array
Z1258	MNR14E0AJ220	Resistor Array
Z1259	MNR14E0AJ220	Resistor Array
Z1260	MNR14E0AJ220	Resistor Array
Z1261	MNR14E0AJ220	Resistor Array
Z1262	MNR14E0AJ220	Resistor Array
Z1263	MNR14E0AJ220	Resistor Array
Z1264	MNR14E0AJ220	Resistor Array
Z1265	MNR14E0AJ220	Resistor Array
Z1266	MNR14E0AJ220	Resistor Array
Z1267	MNR14E0AJ220	Resistor Array
Z1268	MNR14E0AJ220	Resistor Array
Z1269	MNR14E0AJ220	Resistor Array
Z1270	MNR14E0AJ220	Resistor Array
Z1271	MNR14E0AJ220	Resistor Array
Z1272	MNR14E0AJ220	Resistor Array
Z1273	MNR14E0AJ220	Resistor Array
Z1274	MNR14E0AJ220	Resistor Array
Z1276	MNR14E0AJ220	Resistor Array
Z1277	MNR14E0AJ220	Resistor Array
Z1278	MNR14E0AJ220	Resistor Array
	CAPACITORS	
C1001	ECUX1C104ZFV	C 0.1, Z, 16V
C1002	ECUX1C104ZFV	C 0.1, Z, 16V
C1003	ECUX1C104ZFV	C 0.1, Z, 16V
C1004	ECUX1C104ZFV	C 0.1, Z, 16V
C1005	ECUX1C104ZFV	C 0.1, Z, 16V
C1006	ECUX1C104ZFV	C 0.1, Z, 16V
C1007	ECUX1H470JCV	C 47P, J, 50V
C1008	ECUX1H470JCV	C 47P, J, 50V
C1009	ECUX1H470JCV	C 47P, J, 50V
C1010	ECUX1H470JCV	C 47P, J, 50V
C1011	ECEV1AA101SP	C 100, 10V
C1012	ECUX1C104ZFV	C 0.1, Z, 16V
C1013	ECUX1C104ZFV	C 0.1, Z, 16V
C1014	ECUX1C104ZFV	C 0.1, Z, 16V
C1015	ECUX1C104ZFV	C 0.1, Z, 16V
C1016	ECUX1C104ZFV	C 0.1, Z, 16V
C1017	ECUX1C105ZFW	C 1, Z, 16V
C1018	ECUX1C105ZFW	C 1, Z, 16V
C1019	ECUX1C105ZFW	C 1, Z, 16V
C1021	ECUX1C104ZFV	C 0.1, Z, 16V
C1031	ECUX1C104ZFV	C 0.1, Z, 16V
C1032	ECUX1C104ZFV	C 0.1, Z, 16V
C1033	ECUX1C104ZFV	C 0.1, Z, 16V
C1034	ECUX1C104ZFV	C 0.1, Z, 16V
C1035	ECUX1C104ZFV	C 0.1, Z, 16V
C1036	ECUX1C104ZFV	C 0.1, Z, 16V

Ref No.	Part No.	Description
C1037	ECUX1H470JCV	C 47P, J, 50V
C1038	ECUX1H470JCV	C 47P, J, 50V
C1039	ECUX1H470JCV	C 47P, J, 50V
C1040	ECUX1H470JCV	C 47P, J, 50V
C1041	ECEV1AA101SP	C 100, 10V
C1043	ECUX1C104ZFV	C 0.1, Z, 16V
C1044	ECUX1C104ZFV	C 0.1, Z, 16V
C1045	ECUX1C104ZFV	C 0.1, Z, 16V
C1046	ECUX1C104ZFV	C 0.1, Z, 16V
C1047	ECUX1C105ZFW	C 1, Z, 16V
C1048	ECUX1C105ZFW	C 1, Z, 16V
C1049	ECUX1C105ZFW	C 1, Z, 16V
C1051	ECUX1C104ZFV	C 0.1, Z, 16V
C1061	ECUX1C104ZFV	C 0.1, Z, 16V
C1062	ECEV1EA4R7SR	C 4.7, 25V
C1063	ECUX1C104ZFV	C 0.1, Z, 16V
C1064	ECEV1AA221	C 220, 10V
C1065	ECEV1AA221	C 220, 10V
C1068	ECUX1H101JCV	C 100P, J, 50V
C1069	ECUX1C104ZFV	C 0.1, Z, 16V
C1070	ECUX1H101JCV	C 100P, J, 50V
C1071	ECUX1C104ZFV	C 0.1, Z, 16V
C1101	ECUX1C224ZFV	C 0.22, Z, 16V
C1102	ECUX1C224ZFV	C 0.22, Z, 16V
C1103	ECUX1C104ZFV	C 0.1, Z, 16V
C1104	ECEV1AA101SP	C 100, 10V
C1105	ECUX1H220JCV	C 22P, J, 50V
C1106	ECUX1H220JCV	C 22P, J, 50V
C1107	ECUX1C104ZFV	C 0.1, Z, 16V
C1108	ECUX1C104ZFV	C 0.1, Z, 16V
C1109	ECUX1C104ZFV	C 0.1, Z, 16V
C1110	ECUX1C104ZFV	C 0.1, Z, 16V
C1111	ECUX1C104ZFV	C 0.1, Z, 16V
C1112	ECEV1AA101SP	C 100, 10V
C1113	ECUX1C104ZFV	C 0.1, Z, 16V
C1114	ECUX1C104ZFV	C 0.1, Z, 16V
C1115	ECUX1C104ZFV	C 0.1, Z, 16V
C1116	ECUX1C104ZFV	C 0.1, Z, 16V
C1118	ECUX1C102KBV	C 1000P, K, 16V
C1119	ECUX1C104ZFV	C 0.1, Z, 16V
C1120	ECUX1C102KBV	C 1000P, K, 16V
C1130	ECUX1H101JCV	C 100P, J, 50V
C1133	ECUX1H101JCV	C 100P, J, 50V
C1134	ECUX1H101JCV	C 100P, J, 50V
C1135	ECUX1C104ZFV	C 0.1, Z, 16V
C1136	ECUX1C104ZFV	C 0.1, Z, 16V
C1137	ECUX1C104ZFV	C 0.1, Z, 16V
C1138	ECUX1C104ZFV	C 0.1, Z, 16V
C1139	ECUX1C104ZFV	C 0.1, Z, 16V
C1140	ECEV1AA101SP	C 100, 10V
C1141	ECEV1AA101SP	C 100, 10V
C1142	ECEV1AA101SP	C 100, 10V
C1143	ECEV1AA101SP	C 100, 10V
C1144	ECUX1C104ZFV	C 0.1, Z, 16V
C1145	ECEV1AA101SP	C 100, 10V
C1146	ECEV1AA101SP	C 100, 10V
C1147	ECEV1AA101SP	C 100, 10V
C1148	ECEV1AA101SP	C 100, 10V
C1149	ECUX1C104ZFV	C 0.1, Z, 16V
C1150	ECUX1C104ZFV	C 0.1, Z, 16V
C1151	ECUX1C104ZFV	C 0.1, Z, 16V
C1152	ECUX1H101JCV	C 100P, J, 50V
C1153	ECUX1H220JCV	C 22P, J, 50V
C1154	ECUX1H220JCV	C 22P, J, 50V
C1155	ECUX1H220JCV	C 22P, J, 50V
C1156	ECUX1H220JCV	C 22P, J, 50V
C1157	ECUX1H220JCV	C 22P, J, 50V
C1158	ECUX1H220JCV	C 22P, J, 50V
C1159	ECUX1H101JCV	C 100P, J, 50V
C1160	ECUX1H101JCV	C 100P, J, 50V
C1161	ECUX1H101JCV	C 100P, J, 50V
C1162	ECUX1H101JCV	C 100P, J, 50V

MAIN CONTROL Board (continued)

Ref No.	Part No.	Description
C1163	ECUX1H101JCV	C 100P, J, 50V
C1164	ECUX1H101JCV	C 100P, J, 50V
C1201	ECUX1C104ZFV	C 0.1, Z, 16V
C1202	ECUX1C104ZFV	C 0.1, Z, 16V
C1203	ECUX1C104ZFV	C 0.1, Z, 16V
C1204	ECUX1C104ZFV	C 0.1, Z, 16V
C1205	ECUX1C104ZFV	C 0.1, Z, 16V
C1206	ECUX1C104ZFV	C 0.1, Z, 16V
C1207	ECUX1C104ZFV	C 0.1, Z, 16V
C1208	ECUX1C104ZFV	C 0.1, Z, 16V
C1209	ECUX1C104ZFV	C 0.1, Z, 16V
C1211	ECUX1C104ZFV	C 0.1, Z, 16V
C1212	ECUX1C104ZFV	C 0.1, Z, 16V
C1213	ECUX1C104ZFV	C 0.1, Z, 16V
C1214	ECUX1C104ZFV	C 0.1, Z, 16V
C1215	ECUX1C104ZFV	C 0.1, Z, 16V
C1216	ECUX1C104ZFV	C 0.1, Z, 16V
C1217	ECUX1C104ZFV	C 0.1, Z, 16V
C1218	ECUX1C104ZFV	C 0.1, Z, 16V
C1220	ECUX1C104ZFV	C 0.1, Z, 16V
C1221	ECUX1C104ZFV	C 0.1, Z, 16V
C1222	ECUX1C104ZFV	C 0.1, Z, 16V
C1223	ECUX1C102KBV	C 1000P, K, 16V
C1224	ECUX1C104ZFV	C 0.1, Z, 16V
C1225	ECUX1C102KBV	C 1000P, K, 16V
C1226	ECUX1C104ZFV	C 0.1, Z, 16V
C1227	ECUX1C102KBV	C 1000P, K, 16V
C1228	ECUX1C104ZFV	C 0.1, Z, 16V
C1229	ECUX1C102KBV	C 1000P, K, 16V
C1230	ECUX1C104ZFV	C 0.1, Z, 16V
C1231	ECUX1C102KBV	C 1000P, K, 16V
C1232	ECUX1C104ZFV	C 0.1, Z, 16V
C1233	ECUX1C102KBV	C 1000P, K, 16V
C1234	ECUX1C104ZFV	C 0.1, Z, 16V
C1235	ECUX1C104ZFV	C 0.1, Z, 16V
C1236	ECUX1C104ZFV	C 0.1, Z, 16V
C1240	ECUX1C104ZFV	C 0.1, Z, 16V
C1241	ECUX1C104ZFV	C 0.1, Z, 16V
C1242	ECUX1C104ZFV	C 0.1, Z, 16V
C1243	ECUX1C104ZFV	C 0.1, Z, 16V
C1244	ECUX1C104ZFV	C 0.1, Z, 16V
C1245	ECUX1C104ZFV	C 0.1, Z, 16V
C1246	ECUX1C104ZFV	C 0.1, Z, 16V
C1247	ECUX1C104ZFV	C 0.1, Z, 16V
C1248	ECUX1C104ZFV	C 0.1, Z, 16V
C1249	ECUX1C104ZFV	C 0.1, Z, 16V
C1250	ECUX1C104ZFV	C 0.1, Z, 16V
C1251	ECUX1C104ZFV	C 0.1, Z, 16V
C1252	ECUX1C104ZFV	C 0.1, Z, 16V
C1253	ECUX1C104ZFV	C 0.1, Z, 16V
C1254	ECUX1C104ZFV	C 0.1, Z, 16V
C1255	ECUX1C104ZFV	C 0.1, Z, 16V
C1256	ECUX1C104ZFV	C 0.1, Z, 16V
C1257	ECUX1C104ZFV	C 0.1, Z, 16V
C1258	ECUX1C104ZFV	C 0.1, Z, 16V
C1259	ECUX1C104ZFV	C 0.1, Z, 16V
C1260	ECUX1C104ZFV	C 0.1, Z, 16V
C1261	ECUX1C104ZFV	C 0.1, Z, 16V
C1262	ECUX1C104ZFV	C 0.1, Z, 16V
C1263	ECUX1C102KBV	C 1000P, K, 16V
C1264	ECUX1C104ZFV	C 0.1, Z, 16V
C1265	ECUX1C102KBV	C 1000P, K, 16V
C1266	ECUX1C104ZFV	C 0.1, Z, 16V
C1267	ECUX1C102KBV	C 1000P, K, 16V
C1268	ECUX1C104ZFV	C 0.1, Z, 16V
C1269	ECUX1C102KBV	C 1000P, K, 16V
C1270	ECUX1C104ZFV	C 0.1, Z, 16V
C1271	ECUX1C102KBV	C 1000P, K, 16V
C1272	ECUX1C104ZFV	C 0.1, Z, 16V
C1273	ECUX1C102KBV	C 1000P, K, 16V
C1274	ECUX1C104ZFV	C 0.1, Z, 16V
C1275	ECUX1C104ZFV	C 0.1, Z, 16V

Ref No.	Part No.	Description
C1276	ECUX1C104ZFV	C 0.1, Z, 16V
C1277	ECUX1C104ZFV	C 0.1, Z, 16V
C1278	ECUX1C104ZFV	C 0.1, Z, 16V
C1279	ECUX1C104ZFV	C 0.1, Z, 16V
C1280	ECUX1C104ZFV	C 0.1, Z, 16V
Z1140	EZASCE220M	Capacitor Array
Z1141	EZASCE220M	Capacitor Array
Z1142	EZASCE220M	Capacitor Array
Z1143	EZASCE220M	Capacitor Array
Z1144	EZASCE220M	Capacitor Array
Z1145	EZASCE220M	Capacitor Array
Z1146	EZASCE220M	Capacitor Array
Z1147	EZASCE101M	Capacitor Array
Z1148	EZASCE101M	Capacitor Array
Z1149	EZASCE101M	Capacitor Array
Z1150	EZASCE101M	Capacitor Array
Z1151	EZASCE101M	Capacitor Array
Z1152	EZASCE101M	Capacitor Array
Z1153	EZASCE101M	Capacitor Array
Z1154	EZASCE101M	Capacitor Array
Z1155	EZASCE220M	Capacitor Array
Z1156	EZASCE101M	Capacitor Array
Z1157	EZASCE101M	Capacitor Array
Z1158	EZASCE220M	Capacitor Array
Z1159	EZASCE220M	Capacitor Array
Z1160	EZASCE101M	Capacitor Array
Z1161	EZASCE220M	Capacitor Array
Z1162	EZASCE220M	Capacitor Array
	COILS	
L1001	LQH4N220K04	Coil
L1002	LQH4N220K04	Coil
L1103	BLM11A601SPT	Chip Core
L1201	BLM11A601SPT	Chip Core
	DIODES	
D1001	MA132A	Diode
D1101	BR1102W	LED
D1102	BR1102W	LED
D1103	BR1102W	LED
D1104	BR1102W	LED
D1105	BR1102W	LED
D1106	BR1102W	LED
	TRANSISTORS	
Q1001	2SA1037K	Transistor
Q1002	2SA1037K	Transistor
Q1003	2SC2412K	Transistor
Q1005	2SA1037K	Transistor
Q1006	2SA1037K	Transistor
Q1007	2SC2412K	Transistor
Q1009	2SC2412K	Transistor
	ICs	
IC1001	SN74HC4066NS	IC
IC1002	AK5482	IC
IC1003	AK5482	IC
IC1004	SN74HC246NS2	IC
IC1005	TC7S08FU	IC
IC1006	TC7S04FU	IC
IC1102	MBM29F040C90	IC
IC1103	S-29220AFJ	EEPROMn(2k)
IC1104	M51953BFP	Reset IC
IC1105	CY7C199-15VC	SRAM
IC1106	CY7C199-15VC	SRAM
IC1107	SN74HC08NS20	IC
IC1108	SN74HC245NS2	IC
IC1109	HD6432655A00	IC
IC1110	TC74AC138F	IC (AC138)
IC1111	TC74AC138F	IC (AC138)
IC1112	TC74AC273F	TTL74ALS
IC1113	SN74HC245NS2	IC

MAIN CONTROL Board (continued)

Ref No.	Part No.	Description
IC1114	TC74AC138F	IC (AC138)
IC1115	SN74LV32ANS2	IC
IC1117	TC7W00FU	IC
IC1118	TC7W34FU	IC
IC1201	SLAA16AF0Y	IC
IC1202	CY7C199-15VC	SRAM
IC1203	CY7C199-15VC	SRAM
IC1204	CY7C199-15VC	SRAM
IC1205	CY7C199-15VC	SRAM
IC1206	CY7C199-15VC	SRAM
IC1207	CY7C199-15VC	SRAM
IC1208	SLAA16AF1E	IC
IC1209	CY7C199-15VC	SRAM
IC1210	CY7C199-15VC	SRAM
IC1211	CY7C199-15VC	SRAM
IC1212	CY7C199-15VC	SRAM
IC1213	CY7C199-15VC	SRAM
IC1214	CY7C199-15VC	SRAM
IC1215	SN74LV32ANS2	IC
	OTHERS	
	PBAPX0257255B	MAIN Board
CN1001	175487-9	Connector 9P
CN1002	1-175487-1	Connector 11P
CN1003	175487-8	Connector 8P
CN1004	PB175487-10	Connector 10P
CN1005	176381-6	Connector 140P
X1101	1AS200006AZ	Oscillator
X1201	SG8002JA60MH	Oscillator
	3-822273-1	IC Socket

SCSI Board

Ref No.	Part No.	Description
	RESISTORS	
R600	ERJ3GEYJ220	C 22, J, 1/16W
R601	ERJ3GEYJ220	C 22, J, 1/16W
R602	ERJ3GEYJ560	C 56, J, 1/16W
R604	ERJ3GEYJ560	C 56, J, 1/16W
R605	ERJ3GEYJ220	C 22, J, 1/16W
R606	ERJ3GEYJ472	C 4.7k, J, 1/16W
R607	ERJ3GEYJ220	C 22, J, 1/16W
R608	ERJ3GEYJ220	C 22, J, 1/16W
R609	ERJ3GEYJ472	C 4.7k, J, 1/16W
R610	ERJ3GEYJ220	C 22, J, 1/16W
R611	ERJ3GEYJ220	C 22, J, 1/16W
R612	ERJ3GEYJ472	C 4.7k, J, 1/16W
R613	ERJ3GEYJ220	C 22, J, 1/16W
R614	ERJ3GEYJ220	C 22, J, 1/16W
R615	ERJ3GEYJ220	C 22, J, 1/16W
R616	ERJ3GEYJ472	C 4.7k, J, 1/16W
R618	ERJ3GEYJ472	C 4.7k, J, 1/16W
R619	ERJ3GEYJ220	C 22, J, 1/16W
R621	ERJ3GEYJ472	C 4.7k, J, 1/16W
R622	ERJ3GEYJ560	C 56, J, 1/16W
R624	ERJ3GEYJ472	C 4.7k, J, 1/16W
R625	SMD125-2	Poly Switch
R626	ERJ3GEYJ472	C 4.7k, J, 1/16W
R627	ERJ3GEYJ223	C 22k, J, 1/16W
J701	ERJ3GEYJ472	C 4.7k, J, 1/16W
L600	ERJ3GEY0R00	0-ohm Jumper
L601	ERJ3GEY0R00	0-ohm Jumper
Z600	MNR14E0AJ220	Resistor Array
Z601	MNR14E0AJ220	Resistor Array
Z602	MNR14E0AJ220	Resistor Array
Z603	MNR14E0AJ220	Resistor Array
Z604	MNR14E0AJ220	Resistor Array
Z605	MNR14E0AJ220	Resistor Array
Z606	MNR14E0AJ220	Resistor Array
Z607	MNR14E0AJ220	Resistor Array
Z608	MNR14E0AJ220	Resistor Array
Z609	MNR14E0AJ220	Resistor Array
Z610	MNR14E0AJ220	Resistor Array
Z611	MNR14E0AJ220	Resistor Array
Z612	MNR14E0AJ101	Resistor Array
Z613	MNR14E0AJ101	Resistor Array
Z614	MNR14E0AJ220	Resistor Array
Z615	MNR14E0AJ220	Resistor Array
Z616	MNR14E0AJ220	Resistor Array
Z617	MNR14E0AJ220	Resistor Array
Z618	MNR14E0AJ220	Resistor Array
Z619	MNR14E0AJ220	Resistor Array
Z620	MNR14E0AJ220	Resistor Array
Z621	MNR14E0AJ220	Resistor Array
Z622	MNR14E0AJ220	Resistor Array
Z623	MNR14E0AJ472	Resistor Array
Z624	MNR14E0AJ472	Resistor Array
Z625	MNR14E0AJ220	Resistor Array
Z626	MNR14E0AJ220	Resistor Array
Z627	MNR14E0AJ220	Resistor Array
Z628	MNR14E0AJ220	Resistor Array
Z629	MNR14E0AJ220	Resistor Array
Z630	MNR14E0AJ220	Resistor Array
Z631	MNR14E0AJ220	Resistor Array
Z632	MNR14E0AJ220	Resistor Array
Z633	MNR14E0AJ220	Resistor Array
Z634	MNR14E0AJ220	Resistor Array
Z635	MNR14E0AJ220	Resistor Array
Z636	MNR14E0AJ220	Resistor Array
Z637	MNR14E0AJ220	Resistor Array
Z638	MNR14E0AJ472	Resistor Array
Z639	MNR14E0AJ472	Resistor Array
Z640	MNR14E0AJ472	Resistor Array
Z641	MNR14E0AJ472	Resistor Array
Z642	MNR14E0AJ472	Resistor Array
Z643	MNR14E0AJ103	Resistor Array
Z644	MNR14E0AJ103	Resistor Array
Z645	MNR14E0AJ103	Resistor Array
Z646	MNR14E0AJ103	Resistor Array
Z647	MNR14E0AJ103	Resistor Array
Z648	MNR14E0AJ103	Resistor Array
Z649	MNR14E0AJ103	Resistor Array
Z650	MNR14E0AJ103	Resistor Array
Z651	MNR14E0AJ103	Resistor Array
Z652	MNR14E0AJ103	Resistor Array
Z653	MNR14E0AJ103	Resistor Array
Z654	MNR14E0AJ103	Resistor Array
Z655	MNR14E0AJ103	Resistor Array
Z656	MNR14E0AJ103	Resistor Array
Z657	MNR14E0AJ103	Resistor Array
Z658	MNR14E0AJ103	Resistor Array
Z659	MNR14E0AJ472	Resistor Array
Z660	MNR14E0AJ472	Resistor Array
Z661	MNR14E0AJ220	Resistor Array
Z662	MNR14E0AJ220	Resistor Array
Z663	MNR14E0AJ220	Resistor Array
Z664	MNR14E0AJ220	Resistor Array
Z665	MNR14E0AJ220	Resistor Array
Z666	MNR14E0AJ220	Resistor Array
Z667	MNR14E0AJ220	Resistor Array
Z668	MNR14E0AJ220	Resistor Array
Z669	MNR14E0AJ220	Resistor Array
Z670	MNR14E0AJ220	Resistor Array
Z671	MNR14E0AJ220	Resistor Array
Z672	MNR14E0AJ220	Resistor Array
Z673	MNR14E0AJ220	Resistor Array
Z674	MNR14E0AJ220	Resistor Array
	CAPACITORS	
C600	ECUX1C104ZFV	C 0.1, Z, 16V
C601	ECUX1C102KBV	C 1000P, K, 16V
C602	ECUX1C104ZFV	C 0.1, Z, 16V

SCSI Board (continued)

Ref No.	Part No.	Description
C603	ECUX1C102KBV	C 1000P, K, 16V
C604	ECUX1C104ZFV	C 0.1, Z, 16V
C605	ECUX1C102KBV	C 1000P, K, 16V
C606	ECUX1C104ZFV	C 0.1, Z, 16V
C607	ECUX1C102KBV	C 1000P, K, 16V
C608	ECUX1C104ZFV	C 0.1, Z, 16V
C609	ECUX1C102KBV	C 1000P, K, 16V
C610	ECUX1C104ZFV	C 0.1, Z, 16V
C611	ECUX1C102KBV	C 1000P, K, 16V
C612	ECUX1C104ZFV	C 0.1, Z, 16V
C613	ECUX1C102KBV	C 1000P, K, 16V
C614	ECUX1C104ZFV	C 0.1, Z, 16V
C615	ECUX1C102KBV	C 1000P, K, 16V
C616	ECUX1C104ZFV	C 0.1, Z, 16V
C617	ECUX1C102KBV	C 1000P, K, 16V
C618	ECUX1C104ZFV	C 0.1, Z, 16V
C619	ECUX1C102KBV	C 1000P, K, 16V
C620	ECUX1C104ZFV	C 0.1, Z, 16V
C621	ECUX1C102KBV	C 1000P, K, 16V
C622	ECUX1C104ZFV	C 0.1, Z, 16V
C623	ECUX1C102KBV	C 1000P, K, 16V
C624	ECUX1C104ZFV	C 0.1, Z, 16V
C625	ECUX1C102KBV	C 1000P, K, 16V
C626	ECUX1C104ZFV	C 0.1, Z, 16V
C627	ECUX1C102KBV	C 1000P, K, 16V
C628	ECUX1C104ZFV	C 0.1, Z, 16V
C629	ECUX1C102KBV	C 1000P, K, 16V
C630	ECEV1AA101SP	C 100, 10V
C631	ECUX1C102KBV	C 1000P, K, 16V
C632	ECUX1C104ZFV	C 0.1, Z, 16V
C633	ECUX1H101JCV	C 100P, J, 50V
C634	ECUX1C102KBV	C 1000P, K, 16V
C635	ECUX1C104ZFV	C 0.1, Z, 16V
C636	ECUX1C104ZFV	C 0.1, Z, 16V
C637	ECUX1C102KBV	C 1000P, K, 16V
C638	ECUX1C104ZFV	C 0.1, Z, 16V
C639	ECUX1C102KBV	C 1000P, K, 16V
C640	ECUX1C104ZFV	C 0.1, Z, 16V
C641	ECUX1C102KBV	C 1000P, K, 16V
C642	ECUX1C104ZFV	C 0.1, Z, 16V
C643	ECUX1C102KBV	C 1000P, K, 16V
C644	ECUX1C104ZFV	C 0.1, Z, 16V
C645	ECUX1C102KBV	C 1000P, K, 16V
C646	ECUX1C104ZFV	C 0.1, Z, 16V
C647	ECUX1C102KBV	C 1000P, K, 16V
C648	ECUX1C104ZFV	C 0.1, Z, 16V
C649	ECUX1C102KBV	C 1000P, K, 16V
C650	ECUX1C104ZFV	C 0.1, Z, 16V
C651	ECUX1C102KBV	C 1000P, K, 16V
C652	ECUX1C104ZFV	C 0.1, Z, 16V
C653	ECUX1C102KBV	C 1000P, K, 16V
C654	ECUX1H101JCV	C 100P, J, 50V
C655	ECUX1C104ZFV	C 0.1, Z, 16V
C656	ECUX1C102KBV	C 1000P, K, 16V
C657	ECUX1C104ZFV	C 0.1, Z, 16V
C658	ECUX1C102KBV	C 1000P, K, 16V
C659	ECUX1C104ZFV	C 0.1, Z, 16V
C660	ECUX1C102KBV	C 1000P, K, 16V
C661	ECEV1AA101SP	C 100, 10V
C662	ECUX1C104ZFV	C 0.1, Z, 16V
C663	ECUX1C102KBV	C 1000P, K, 16V
C664	ECEV1AA101SP	C 100, 10V
C665	ECEV1AA101SP	C 100, 10V
C666	ECUX1C104ZFV	C 0.1, Z, 16V
C667	ECUX1C104ZFV	C 0.1, Z, 16V
C668	ECUX1C102KBV	C 1000P, K, 16V
C669	ECUX1H101JCV	C 100P, J, 50V
C670	ECUX1C104ZFV	C 0.1, Z, 16V
C671	ECUX1C102KBV	C 1000P, K, 16V
C672	ECUX1C104ZFV	C 0.1, Z, 16V
C673	ECUX1C102KBV	C 1000P, K, 16V
C674	ECEV1AA101SP	C 100, 10V

Ref No.	Part No.	Description
C675	ECUX1C104ZFV	C 0.1, Z, 16V
C676	ECUX1C104ZFV	C 0.1, Z, 16V
C677	ECEV1CA100	C 10, 16V
C678	ECUX1C104ZFV	C 0.1, Z, 16V
C679	ECUX1C102KBV	C 1000P, K, 16V
C680	ECUX1C104ZFV	C 0.1, Z, 16V
C681	ECUX1C102KBV	C 1000P, K, 16V
C682	ECUX1C104ZFV	C 0.1, Z, 16V
C683	ECUX1C102KBV	C 1000P, K, 16V
C684	ECUX1C104ZFV	C 0.1, Z, 16V
C685	ECUX1C102KBV	C 1000P, K, 16V
C686	ECUX1C104ZFV	C 0.1, Z, 16V
C687	ECUX1C102KBV	C 1000P, K, 16V
C688	ECUX1C104ZFV	C 0.1, Z, 16V
C689	ECUX1C102KBV	C 1000P, K, 16V
C690	ECUX1C104ZFV	C 0.1, Z, 16V
C691	ECUX1C102KBV	C 1000P, K, 16V
C692	ECUX1C104ZFV	C 0.1, Z, 16V
C693	ECUX1C102KBV	C 1000P, K, 16V
C694	ECUX1C104ZFV	C 0.1, Z, 16V
C695	ECUX1C102KBV	C 1000P, K, 16V
C696	ECUX1C104ZFV	C 0.1, Z, 16V
C697	ECUX1C102KBV	C 1000P, K, 16V
C698	ECUX1C104ZFV	C 0.1, Z, 16V
C699	ECUX1C102KBV	C 1000P, K, 16V
C700	ECUX1C104ZFV	C 0.1, Z, 16V
C701	ECU1H102KBV	C 1000P, K, 50V
C702	ECEV1AA101SP	C 100, 10V
C703	ECU1H102KBV	C 1000P, K, 50V
C704	ECUX1C104ZFV	C 0.1, Z, 16V
C705	ECU1H102KBV	C 1000P, K, 50V
C706	ECEV1AA101SP	C 100, 10V
C707	ECU1H102KBV	C 1000P, K, 50V
C708	ECEV1AA101SP	C 100, 10V
C709	ECU1H102KBV	C 1000P, K, 50V
C710	ECUX1C104ZFV	C 0.1, Z, 16V
C711	ECU1H102KBV	C 1000P, K, 50V
C712	ECEV1AA101SP	C 100, 10V
C713	ECU1H102KBV	C 1000P, K, 50V
C714	ECUX1C104ZFV	C 0.1, Z, 16V
C716	ECEV1AA101SP	C 100, 10V
C717	ECUX1C104ZFV	C 0.1, Z, 16V
C718	ECU1H102KBV	C 1000P, K, 50V
C719	ECEV1AA101SP	C 100, 10V
C720	ECUX1C104ZFV	C 0.1, Z, 16V
C721	ECU1H102KBV	C 1000P, K, 50V
C722	ECEV1AA101SP	C 100, 10V
C723	ECUX1C104ZFV	C 0.1, Z, 16V
C724	ECU1H102KBV	C 1000P, K, 50V
C725	ECEV1AA101SP	C 100, 10V
C726	ECUX1C104ZFV	C 0.1, Z, 16V
C727	ECU1H102KBV	C 1000P, K, 50V
C748	ECUX1H470JCV	C 47P, J, 50V
C749	ECUX1H470JCV	C 47P, J, 50V
C750	ECUX1H470JCV	C 47P, J, 50V
C751	ECUX1H470JCV	C 47P, J, 50V
	DIODE	
D600	RB050L40TE25	Diode
	TRANSISTORS	
Q601	UN2212	Transistor
Q602	UN2212	Transistor
	ICs	
IC600	MN5AA180Z9D	IC
IC601	SN74HC74NS20	IC
IC602	PM-2MC25MHZ	IC
IC603	CY7C199-15VC	SRAM
IC604	CY7C199-15VC	SRAM
IC605	TC7S04F	IC
IC606	SYM53CF96-21	IC

SCSI Board (continued)

Ref No.	Part No.	Description
IC607	BH9598AFP	IC
IC610	HM5117800BJ7	DRAM
IC611	HM5117800BJ7	DRAM
IC612	HM5117800BJ7	DRAM
IC613	HM5117800BJ7	DRAM
IC614	SN74HC245NS2	IC
IC615	TC7S08FU	IC
	OTHERS	
	PBAPX258255A	SCSI Board
	XSN25+4FX	
CN600	PCSXE50WSLFD	SCSI Half-pitch Connector
CN601	176438-7	Connector 7P
CN602	176438-7	Connector 7P
CN603	176381-3	Connector 80P
X600	SG615PTJ-50M	Oscillator
X601	SG615PTJ-40M	Oscillator

DRIVE Board

Ref No.	Part No.	Description
	RESISTORS	
R331	ERDS2TJ392	C 3.9k, J, 1/4W
R332	ERDS2TJ222	C 2.2k, J, 1/4W
R333	ERDS2TJ392	C 3.9k, J, 1/4W
R334	ERDS2TJ222	C 2.2k, J, 1/4W
R335	ERDS2TJ472	C 4.7k, J, 1/4W
R336	ERDS2TJ472	C 4.7k, J, 1/4W
R341	ER0S2TKF1101	M 1.10k, F, 1/4W
R342	ERDS2TJ391	C 390, J, 1/4W
R343	ERDS2TJ181	C 180, J, 1/4W
R344	MPC710.22K	Resistor
R345	MPC710.22K	Resistor
R351	ERDS2TJ102	C 1k, J, 1/4W
R352	ERDS2TJ471	C 470, J, 1/4W
R353	ERDS2TJ121	C 120, J, 1/4W
R354	MPC710.22K	Resistor
R355	MPC710.22K	Resistor
R361	ERDS2TJ122	C 1.2k, J, 1/4W
R362	ERDS2TJ681	C 680, J, 1/4W
R363	ERDS2TJ151	C 150, J, 1/4W
R364	MPC710.47K	Resistor
R365	MPC710.47K	Resistor
R373	ERDS2TJ102	C 1k, J, 1/4W
R374	ERDS2TJ102	C 1k, J, 1/4W
R377	ERDS2TJ103	C 10k, J, 1/4W
R378	ERDS2TJ103	C 10k, J, 1/4W
R381	ER0S2TKF2942	M 29.4k, F, 1/4W
R382	ER0S2CKF1001	M 1k, F, 1/4W
R383	ERX1SJR22P	M 22, J, 1/2W
R384	ERDS2TJ562	C 5.6k, J, 1/4W
R385	ERDS2TJ272	C 2.7k, J, 1/4W
R386	ERDS2TJ152	C 1.5, J, 1/4W
R387	ERDS2TJ102	C 1k, J, 1/4W
R391	ERDS2TJ102	C 1k, J, 1/4W
R392	ERDS2TJ222	C 2.2k, J, 1/4W
R394	ERDS2TJ472	C 4.7k, J, 1/4W
R395	ERDS2TJ472	C 4.7k, J, 1/4W
R396	ERDS2TJ472	C 4.7k, J, 1/4W
R472	ERDS2TJ561	C 560, J, 1/4W
R473	ERDS2TJ561	C 560, J, 1/4W
R476	ERG2SJ102P	M 1k, J, 2W
R477	ERG2SJ102P	M 1k, J, 2W
R480	ERDS2TJ181	C 180, J, 1/4W
R481	ERDS2TJ181	C 180, J, 1/4W
R482	ERDS2TJ472	C 4.7k, J, 1/4W
R483	ERDS2TJ472	C 4.7k, J, 1/4W
R484	ERDS2TJ472	C 4.7k, J, 1/4W
Z391	EXBZ9E103J	Resistor Array

Ref No.	Part No.	Description
	CAPACITORS	
C331	35YXF220MT8	C 220, 35V
C332	ECFF1H104ZF5	C 0.1, Z 50V
C341	50YXF33M	E 33, 50V
C342	ECFF1H104ZF5	C 0.1, Z 50V
C343	ECKF1H472KB5	C 4700p, K, 50V
C344	35YXF220MT8	C 220, 35V
C351	50YXF33M	E 33, 50V
C352	ECFF1H104ZF5	C 0.1, Z 50V
C353	ECKF1H472KB5	C 4700p, K, 50V
C354	35YXF220MT8	C 220, 35V
C361	50YXF33M	E 33, 50V
C362	ECFF1H104ZF5	C 0.1, Z 50V
C363	ECKF1H472KB5	C 4700p, K, 50V
C364	35YXF220MT8	C 220, 35V
C371	ECFF1H104ZF5	C 0.1, Z 50V
C372	35YXF220MT8	C 220, 35V
C373	ECFF1H104ZF5	C 0.1, Z 50V
C374	ECFF1H104ZF5	C 0.1, Z 50V
C375	ECFF1H104ZF5	C 0.1, Z 50V
C376	ECFF1H104ZF5	C 0.1, Z 50V
C381	ECKD3A331KBP	C 330p, K, 1kV
C382	35YXF220MT8	C 220, 35V
C383	50YXF220M	C 220, 50V
C391	ECFF1H104ZF5	C 0.1, Z 50V
C392	ECFF1H104ZF5	C 0.1, Z 50V
C393	ECFF1H104ZF5	C 0.1, Z 50V
C394	ECFF1H104ZF5	C 0.1, Z 50V
C482	ECQV1H474JL3	P 0.47, J, 50V
C483	ECQV1H474JL3	P 0.47, J, 50V
	COIL	
L381	RCH110-471K	Choke Coil
	DIODES	
D331	HZS18-1	Zener Diode
D332	HZS18-1	Zener Diode
D381	ERA91-02	Diode
	TRANSISTORS	
Q331	2SC3311A	Transistor
Q332	2SC3311A	Transistor
Q341	UN4221	Transistor with Resistor
Q342	DTB113ZV	transistor
Q351	UN4221	Transistor with Resistor
Q352	DTB113ZV	transistor
Q361	UN4221	Transistor with Resistor
Q362	DTB113ZV	transistor
Q373	2SC3311A	Transistor
Q374	2SC3311A	Transistor
Q377	2SB947A-P	Transistor
Q378	2SB947A-P	Transistor
Q381	2SD2137-P	Transistor
Q391	UN4213	Transistor
Q392	UN4221	Transistor with Resistor
Q393	UN4221	Transistor with Resistor
Q394	UN4221	Transistor with Resistor
	ICs	
IC341	SLA7044MLF87	IC
IC351	SLA7044MLF87	IC
IC361	SLA7044MLF87	IC
IC371	M62353P	D/A Converter
IC381	NJM2360AD	IC
IC391	TC74HC273P	CMOS74HC
IC392	TC74HC273P	CMOS74HC
IC393	TC74HC273P	CMOS74HC
	OTHERS	
	PBAPX2606045	DRIVE Board
	PBMYA0014Z	Heat Sink
	PBMYA0015Z	Heat Sink

DRIVE Board (continued)

Ref No.	Part No.	Description
	XNG3BFC	Nut
	XYN3+J8FX	Screw
	XYN3+J10FC	Screw
CN331	128A32P2L14A	Connector 32P
CN332	S4P-VH	Connector 4P
CN341	S06B-XASK-1	Connector 5P
CN351	S07B-XASK-1	Connector 6P
CN361	S08B-XASK-1	Connector 7P
CN372	S05B-XASK-1	Connector 4P
Z341	ICP-N70T104	IC Protector
Z351	ICP-N70T104	IC Protector
Z361	ICP-N70T104	IC Protector
Z371	ICP-N70T104	IC Protector
Z381	ICP-N70T104	IC Protector
Z382	RXE020	Poly Switch (200mA) ⚠

MOTHER Board

Ref No.	Part No.	Description
	RESISTORS	
R2001	ERJ3GEYJ104	C 100k, J, 1/16W
R2002	ERJ3GEYJ104	C 100k, J, 1/16W
R2003	ERJ3GEYJ104	C 100k, J, 1/16W
R2004	ERJ3GEYJ104	C 100k, J, 1/16W
R2005	ERJ3GEYJ104	C 100k, J, 1/16W
R2006	ERJ3GEYJ104	C 100k, J, 1/16W
R2007	ERJ3GEYJ104	C 100k, J, 1/16W
R2008	ERJ3GEYJ104	C 100k, J, 1/16W
R2009	ERJ3GEYJ104	C 100k, J, 1/16W
R2010	ERJ3GEYJ104	C 100k, J, 1/16W
R2011	ERJ3GEYJ104	C 100k, J, 1/16W
R2012	ERJ3GEYJ104	C 100k, J, 1/16W
R2013	ERJ3GEYJ104	C 100k, J, 1/16W
R2014	ERJ3GEYJ104	C 100k, J, 1/16W
R2015	ERJ3GEYJ104	C 100k, J, 1/16W
R2016	ERJ3GEYJ104	C 100k, J, 1/16W
R2019	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2020	ERJ3GEYJ102	C 1k, J, 1/16W
R2021	ERJ3GEYJ102	C 1k, J, 1/16W
R2022	ERJ3GEYJ103	C 10k, J, 1/16W
R2023	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2024	ERJ3GEYJ102	C 1k, J, 1/16W
R2025	ERJ3GEYJ102	C 1k, J, 1/16W
R2026	ERJ3GEYJ103	C 10k, J, 1/16W
R2027	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2028	ERJ3GEYJ102	C 1k, J, 1/16W
R2029	ERJ3GEYJ102	C 1k, J, 1/16W
R2030	ERJ3GEYJ103	C 10k, J, 1/16W
R2031	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2032	ERJ3GEYJ102	C 1k, J, 1/16W
R2033	ERJ3GEYJ102	C 1k, J, 1/16W
R2034	ERJ3GEYJ103	C 10k, J, 1/16W
R2035	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2036	ERJ3GEYJ102	C 1k, J, 1/16W
R2037	ERJ3GEYJ102	C 1k, J, 1/16W
R2038	ERJ3GEYJ103	C 10k, J, 1/16W
R2039	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2040	ERJ3GEYJ102	C 1k, J, 1/16W
R2041	ERJ3GEYJ102	C 1k, J, 1/16W
R2042	ERJ3GEYJ103	C 10k, J, 1/16W
R2043	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2044	ERJ3GEYJ102	C 1k, J, 1/16W
R2045	ERJ3GEYJ102	C 1k, J, 1/16W
R2046	ERJ3GEYJ103	C 10k, J, 1/16W
R2047	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2048	ERJ3GEYJ102	C 1k, J, 1/16W
R2049	ERJ3GEYJ102	C 1k, J, 1/16W
R2050	ERJ3GEYJ103	C 10k, J, 1/16W
R2051	ERJ3GEYJ102	C 1k, J, 1/16W
R2052	ERJ3GEYJ391	C 390, J, 1/16W
R2053	ERJ6GEYJ331	C 330, J, 1/10W
R2054	ERJ6GEYJ331	C 330, J, 1/10W
R2055	ERJ6GEYJ331	C 330, J, 1/10W
R2056	ERJ6GEYJ331	C 330, J, 1/10W
R2057	ERJ6GEYJ331	C 330, J, 1/10W
R2058	ERJ6GEYJ331	C 330, J, 1/10W
R2059	ERJ6GEYJ331	C 330, J, 1/10W
R2060	ERJ6GEYJ331	C 330, J, 1/10W
R2061	ERJ6GEYJ331	C 330, J, 1/10W
R2062	ERJ6GEYJ331	C 330, J, 1/10W
R2063	ERJ6GEYJ331	C 330, J, 1/10W
R2064	ERJ6GEYJ331	C 330, J, 1/10W
R2065	ERJ6GEYJ331	C 330, J, 1/10W
R2066	ERJ6GEYJ331	C 330, J, 1/10W
R2067	ERJ6GEYJ331	C 330, J, 1/10W
R2068	ERJ6GEYJ331	C 330, J, 1/10W
R2069	ERJ6GEYJ331	C 330, J, 1/10W
R2070	ERJ6GEYJ331	C 330, J, 1/10W
R2071	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2072	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2073	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2074	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2075	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2076	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2077	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2078	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2079	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2080	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2081	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2082	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2083	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2084	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2085	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2086	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2087	ERJ6GEYJ331	C 330, J, 1/10W
R2088	ERJ6GEYJ331	C 330, J, 1/10W
R2089	ERJ6GEYJ331	C 330, J, 1/10W
R2090	ERJ6GEYJ331	C 330, J, 1/10W
R2091	ERJ3GEYJ151	C 150, J, 1/16W
R2092	ERJ3GEYJ151	C 150, J, 1/16W
R2093	ERJ3GEYJ151	C 150, J, 1/16W
R2094	ERJ3GEYJ151	C 150, J, 1/16W
R2095	ERJ3GEYJ151	C 150, J, 1/16W
R2096	ERJ3GEYJ151	C 150, J, 1/16W
R2097	ERJ3GEYJ151	C 150, J, 1/16W
R2098	ERJ3GEYJ151	C 150, J, 1/16W
R2099	ERJ3GEYJ151	C 150, J, 1/16W
R2100	ERJ3GEYJ151	C 150, J, 1/16W
R2101	ERJ3GEYJ151	C 150, J, 1/16W
R2102	ERJ3GEYJ151	C 150, J, 1/16W
R2103	ERJ3GEYJ151	C 150, J, 1/16W
R2104	ERJ3GEYJ471	C 470, J, 1/16W
R2105	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2106	ERJ3GEYJ104	C 100k, J, 1/16W
R2107	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2108	ERJ3GEYJ472	C 4.7k, J, 1/16W
R2109	ERJ3GEYJ104	C 100k, J, 1/16W
R2110	ERJ3GEYJ104	C 100k, J, 1/16W
R2111	ERJ12YJ471	C 470, J, 1/4W
R2112	ERJ12YJ471	C 470, J, 1/4W
R2113	ERJ12YJ471	C 470, J, 1/4W
R2114	ERJ12YJ471	C 470, J, 1/4W
R2115	ERJ12YJ471	C 470, J, 1/4W
R2116	ERJ3GEYJ471	C 470, J, 1/16W
R2117	ERJ6GEYJ181	C 180, J, 1/10W
R2118	ERJ6GEYJ181	C 180, J, 1/10W
R2119	ERJ3GEYJ104	C 100k, J, 1/16W

MOTHER Board (continued)

Ref No.	Part No.	Description
	CAPACITORS	
C2001	ECUX1E104ZFV	C 0.1, Z, 25V
C2002	ECUX1E104ZFV	C 0.1, Z, 25V
C2003	ECUX1E104ZFV	C 0.1, Z, 25V
C2004	ECUX1E104ZFV	C 0.1, Z, 25V
C2005	ECUX1E104ZFV	C 0.1, Z, 25V
C2006	ECUX1E104ZFV	C 0.1, Z, 25V
C2007	ECUX1E104ZFV	C 0.1, Z, 25V
C2008	ECUX1H102KBV	C 1000P, K, 50V
C2009	ECUX1H102KBV	C 1000P, K, 50V
C2010	ECUX1H102KBV	C 1000P, K, 50V
C2011	ECUX1H102KBV	C 1000P, K, 50V
C2012	ECUX1H102KBV	C 1000P, K, 50V
C2013	ECUX1H102KBV	C 1000P, K, 50V
C2014	ECUX1H102KBV	C 1000P, K, 50V
C2015	ECUX1H102KBV	C 1000P, K, 50V
C2016	ECUX1H102KBV	C 1000P, K, 50V
C2017	ECUX1E104ZFV	C 0.1, Z, 25V
C2018	ECUX1E104ZFV	C 0.1, Z, 25V
C2051	ECEV1EA101UP	C 100, 16V
C2061	ECEV1EA101UP	C 100, 16V
C2062	ECUX1E104ZFV	C 0.1, Z, 25V
C2063	ECUX1E104ZFV	C 0.1, Z, 25V
C2064	ECEV1EA101UP	C 100, 16V
C2065	ECEV1EA101UP	C 100, 16V
C2066	ECEV1EA101UP	C 100, 16V
	DIODES	
D2002	SC016-2TE12	Diode
D2003	SC016-2TE12	Diode
D2004	SC016-2TE12	Diode
	TRANSISTORS	
Q2002	2SC2412K	Transistor
Q2003	2SC2412K	Transistor
Q2004	2SC2412K	Transistor
Q2005	2SC2412K	Transistor
Q2006	2SC2412K	Transistor
Q2007	2SC2412K	Transistor
Q2008	2SC2412K	Transistor
Q2009	2SC2412K	Transistor
Q2010	2SC2412K	Transistor
Q2011	2SC2412K	Transistor
Q2012	2SC2412K	Transistor
Q2013	2SC2412K	Transistor
Q2014	2SC2412K	Transistor
	ICs	
IC2001	SN74HC245NS2	IC
IC2002	NJM2901M	IC
IC2003	NJM2901M	IC
IC2004	M62353FP75N	D/A Converter (8ch)
IC2005	M62353FP75N	D/A Converter (8ch)
IC2006	SN74HC245NS2	IC
IC2007	SN74HC245NS2	IC
IC2010	UPC29M12HF	IC
	OTHERS	
	PBAPX2796045	MOTHER Board
CN2001	176379-6	Connector 140P
CN2002	176379-3	Connector 80P
CN2003	128A32S2L14A	Connector 32P
CN2004	S09B-XASK-1	Connector 7P
CN2005	S04B-XASK-1	Connector 4P
CN2007	DF1122DP2DSA	Connector 22P
CN2008	SLD34R-1	Connector 32P
CN2009	26FMZ-BT	Connector 26P
CN2010	28FMZ-BT	Connector 28P
CN2011	ILS4PS2L2EF	Connector 4P
Z2001	RXE065	Poly Switch (650mA) ⚠
Z2002	RXE017	Poly Switch (170mA) ⚠
Z2003	RXE017	Poly Switch (170mA) ⚠

PANEL Board

Ref No.	Part No.	Description
	RESISTORS	
R543	ERDS2TJ332	C 3.3k, J, 1/4W
R544	ERDS2TJ103	C 10k, J, 1/4W
R545	ERDS2TJ332	C 3.3k, J, 1/4W
R546	ERDS2TJ182	C 1.8k, J, 1/4W
R547	ERDS2TJ681	C 680, J, 1/4W
R548	ERDS2TJ331	C 330, J, 1/4W
R549	ERDS2TJ182	C 1.8k, J, 1/4W
R550	ERDS2TJ151	C 150, J, 1/4W
R551	ERDS2TJ102	C 1k, J, 1/4W
R552	ERDS2TJ102	C 1k, J, 1/4W
R553	ERDS2TJ102	C 1k, J, 1/4W
R554	ERDS2TJ102	C 1k, J, 1/4W
R555	ERDS2TJ102	C 1k, J, 1/4W
R556	ERDS2TJ102	C 1k, J, 1/4W
R557	ERDS2TJ102	C 1k, J, 1/4W
R558	ERDS2TJ102	C 1k, J, 1/4W
R559	ERDS2TJ102	C 1k, J, 1/4W
R560	ERDS2TJ102	C 1k, J, 1/4W
R570	ERDS2TJ103	C 10k, J, 1/4W
R571	ERDS2TJ103	C 10k, J, 1/4W
R572	ERDS2TJ103	C 10k, J, 1/4W
R573	ERDS2TJ103	C 10k, J, 1/4W
Z503	EXBZ5E103J	Resistor Array
Z505	EXBZ5E103J	Resistor Array
Z507	EXBZ5E103J	Resistor Array
Z508	EXBZ5E103J	Resistor Array
	CAPACITORS	
C544	ECQV1H224JL	P 0.22, J, 50V
C545	RPE132F104	Capacitor
C546	RPE132F104	Capacitor
C547	ECEA1AKS101	E 100, 10V
C548	RPE132F104	Capacitor
C549	RPE132F104	Capacitor
C587	RPE132F104	Capacitor
C588	RPE132F104	Capacitor
C589	RPE132F104	Capacitor
	DIODE	
D513	GL9ED2	LED
	TRANSISTORS	
Q536	UN4213	Transistor
Q538	UN4213	Transistor
Q539	UN4213	Transistor
	ICs	
IC508	SN74HC365N	IC
IC509	SN74HC365N	IC
IC510	RCM7065X-B	Choke Coil
	OTHERS	
	PBAPX2806045	PANEL Board
	FFC14AMEP1	Connector
	C-2005	Spacer
	XNG2EFX	Nut
	XYN2+J12FX	Screw
BZ501	PKM22EPP4002	Buzzer
CN536	DF11-22DP2DS	Connector 22P
SW501	EVQ23405R	Switch
SW502	EVQ23405R	Switch
SW503	EVQ23405R	Switch
SW504	EVQ23405R	Switch
SW505	EVQ23405R	Switch
SW506	EVQ23405R	Switch
SW507	EVQ23405R	Switch
SW508	EVQ23405R	Switch
SW509	EVQ23405R	Switch
SW510	EVQ23405R	Switch

CARRIAGE HOME DETECTOR Board

Ref No.	Part No.	Description
	RESISTORS	
R501	ERDS2TJ331	C 330, J, 1/4W
R502	ERDS2TJ103	C 10k, J, 1/4W
	CAPACITOR	
C501	RPE132F104	Capacitor
	TRANSISTOR	
Q501	2SC3311A	Transistor
	IC	
IC501	TLP832	Photointerrupter
	OTHERS	
	PBAPX2816045	CARRIAGE HOME SENSOR Board
CN516	ILS4PS2L2EF	Connector 4P

CCD Board

Ref No.	Part No.	Description
	RESISTORS	
R1	ERJ3GEYJ470	C 47, J, 1/16W
R2	ERJ3GEYJ222	C 2.2k, J, 1/16W
R3	ERJ3GEYJ103	C 10k, J, 1/16W
R4	ERJ3GEYJ472	C 4.7k, J, 1/16W
R5	ERJ3GEYJ561	C 560, J, 1/16W
R6	ERJ3GEYJ562	C 5.6k, J, 1/16W
R7	ERJ3GEYJ152	C 1.5k, J, 1/16W
R8	ERJ3GEYJ470	C 47, J, 1/16W
R9	ERJ3GEY0R00	0-ohm Jumper
R10	ERJ3GEYJ102	C 1k, J, 1/16W
R11	ERJ3GEYJ102	C 1k, J, 1/16W
R14	ERJ3GEYJ470	C 47, J, 1/16W
R16	ERJ3GEYJ470	C 47, J, 1/16W
R17	ERJ3GEYJ470	C 47, J, 1/16W
R20	ERJ3GEYJ223	C 22k, J, 1/16W
R21	ERJ3GEYJ223	C 22k, J, 1/16W
R31	ERJ3GEYJ470	C 47, J, 1/16W
R32	ERJ3GEYJ222	C 2.2k, J, 1/16W
R33	ERJ3GEYJ103	C 10k, J, 1/16W
R34	ERJ3GEYJ472	C 4.7k, J, 1/16W
R35	ERJ3GEYJ561	C 560, J, 1/16W
R36	ERJ3GEYJ562	C 5.6k, J, 1/16W
R37	ERJ3GEYJ152	C 1.5k, J, 1/16W
R38	ERJ3GEYJ470	C 47, J, 1/16W
R39	ERJ3GEY0R00	0-ohm Jumper
R40	ERJ3GEYJ102	C 1k, J, 1/16W
R41	ERJ3GEYJ102	C 1k, J, 1/16W
R44	ERJ3GEYJ470	C 47, J, 1/16W
R46	ERJ3GEYJ470	C 47, J, 1/16W
R47	ERJ3GEYJ470	C 47, J, 1/16W
R51	ERJ3GEYJ220	C 22, J, 1/16W
R52	ERJ3GEYJ221	C 220, J, 1/16W
R53	ERJ3GEYJ681	C 680, J, 1/16W
R54	ERJ3GEYJ102	C 1k, J, 1/16W
R55	ERJ6GEYJ270	C 27, J, 1/10W
R60	ERJ3GEYJ470	C 47, J, 1/16W
R61	ERJ3GEYJ220	C 22, J, 1/16W
R62	ERJ3GEYJ221	C 220, J, 1/16W
R63	ERJ3GEYJ681	C 680, J, 1/16W
R64	ERJ3GEYJ102	C 1k, J, 1/16W
R65	ERJ6GEYJ270	C 27, J, 1/10W
R67	ERJ3GEYJ103	C 10k, J, 1/16W
R68	ERJ3GEYJ681	C 680, J, 1/16W
R69	ERJ3GEYJ102	C 1k, J, 1/16W
R71	ERJ3GEYJ101	C 100, J, 1/16W
R72	ERJ3GEYJ101	C 100, J, 1/16W
R73	ERJ3GEYJ2R2	C 2.2, J, 1/16W
R74	ERJ3GEYJ2R2	C 2.2, J, 1/16W
R75	ERJ3GEYJ101	C 100, J, 1/16W
R76	ERJ3GEYJ101	C 100, J, 1/16W
R77	ERJ3GEYJ2R2	C 2.2, J, 1/16W
R78	ERJ3GEYJ2R2	C 2.2, J, 1/16W
R79	ERJ3GEYJ101	C 1k, J, 1/16W
R80	ERJ3GEY0R00	0-ohm Jumper
R81	ERJ3GEYJ681	C 680, J, 1/16W
R82	ERJ3GEYJ102	C 1k, J, 1/16W
R83	ERJ3GEYJ681	C 680, J, 1/16W
R84	ERJ3GEYJ102	C 1k, J, 1/16W
R85	ERJ3GEYJ681	C 680, J, 1/16W
R86	ERJ3GEYJ102	C 1k, J, 1/16W
R87	ERJ3GEYJ681	C 680, J, 1/16W
R88	ERJ3GEYJ102	C 1k, J, 1/16W
R89	ERJ3GEYJ470	C 47, J, 1/16W
R90	ERJ3GEYJ470	C 47, J, 1/16W
R91	ERJ3GEYJ470	C 47, J, 1/16W
R92	ERJ3GEY0R00	0-ohm Jumper
R96	ERJ3GEY0R00	0-ohm Jumper
R97	ERJ3GEY0R00	0-ohm Jumper
R98	ERJ3GEY0R00	0-ohm Jumper
	CAPACITORS	
C1	ECUX1E104ZFV	C 0.1, Z, 25V
C2	ECUX1E104ZFV	C 0.1, Z, 25V
C3	ECEV1CA101P	C 100, 16V
C4	ECUX1E104ZFV	C 0.1, Z, 25V
C5	ECUX1E104ZFV	C 0.1, Z, 25V
C6	ECEV1CA101P	C 100, 16V
C7	ECUX1E104ZFV	C 0.1, Z, 25V
C8	ECUX1E104ZFV	C 0.1, Z, 25V
C9	ECUX1E104ZFV	C 0.1, Z, 25V
C10	ECUX1E104ZFV	C 0.1, Z, 25V
C11	ECEV1AA101SP	C 100, 10V
C13	ECUX1E104ZFV	C 0.1, Z, 25V
C14	ECEV1AA101SP	C 100, 10V
C15	ECUX1E104ZFV	C 0.1, Z, 25V
C16	ECUX1E104ZFV	C 0.1, Z, 25V
C31	ECUX1E104ZFV	C 0.1, Z, 25V
C32	ECEV1CA101P	C 100, 16V
C33	ECUX1E104ZFV	C 0.1, Z, 25V
C34	ECUX1E104ZFV	C 0.1, Z, 25V
C35	ECUX1E104ZFV	C 0.1, Z, 25V
C36	ECUX1E104ZFV	C 0.1, Z, 25V
C37	ECEV1AA101SP	C 100, 10V
C39	ECUX1E104ZFV	C 0.1, Z, 25V
C40	ECEV1AA101SP	C 100, 10V
C41	ECEV1AA330NP	C 33, 10V
C42	ECUX1E104ZFV	C 0.1, Z, 25V
C43	ECEV1AA330NP	C 33, 10V
C44	ECUX1E104ZFV	C 0.1, Z, 25V
C45	ECUX1E104ZFV	C 0.1, Z, 25V
C46	ECUX1E104ZFV	C 0.1, Z, 25V
C47	ECUX1E104ZFV	C 0.1, Z, 25V
C48	ECUX1E104ZFV	C 0.1, Z, 25V
C49	ECEV1AA101SP	C 100, 10V
C50	ECUX1E104ZFV	C 0.1, Z, 25V
C51	ECUX1E104ZFV	C 0.1, Z, 25V
C52	ECUX1E104ZFV	C 0.1, Z, 25V
C53	ECEV1AA101SP	C 100, 10V
C54	ECUX1E104ZFV	C 0.1, Z, 25V
C55	ECEV1AA101SP	C 100, 10V
C56	ECUX1E104ZFV	C 0.1, Z, 25V
C57	ECEV1AA101SP	C 100, 10V
C58	ECUX1E104ZFV	C 0.1, Z, 25V
C59	ECUX1E104ZFV	C 0.1, Z, 25V
C60	ECUX1E104ZFV	C 0.1, Z, 25V
C61	ECUX1E104ZFV	C 0.1, Z, 25V
C62	ECUX1E104ZFV	C 0.1, Z, 25V
C63	ECUX1E104ZFV	C 0.1, Z, 25V
C64	ECUX1H101JCV	C 100p, Z, 50V
C81	ECUX1E104ZFV	C 0.1, Z, 25V
C82	ECUX1E104ZFV	C 0.1, Z, 25V

CCD Board (continued)

Ref No.	Part No.	Description
C83	ECEV1AA101SP	C 100, 10V
C84	ECUX1H101JCV	C 100p, Z, 50V
C91	ECEV1VA470P	Capacitor
C92	ECEV1VA470P	Capacitor
C93	ECEV1VA470P	Capacitor
C94	ECEV1VA470P	Capacitor
C99	ECUX1E104ZFV	C 0.1, Z, 25V
	COILS	
L1	LQH4N220K04	Coil
L2	LQH4N220K04	Coil
L3	LQH4N220K04	Coil
L4	LQH4N220K04	Coil
L5	LQH4N220K04	Coil
	DIODE	
D1	S1ZAS44062	Diode
	TRANSISTORS	
Q1	2SC2412K	Transistor
Q2	IMT1A	Transistor
Q3	2SC2412K	Transistor
Q4	IMT1A	Transistor
Q5	2SA1037K	Transistor
Q6	2SC2412K	Transistor
Q7	2SA1037K	Transistor
Q8	2SC2412K	Transistor
Q9	IMB1A	Digital Transistor
	ICs	
IC1	ILX510	IC
IC2	LM6171BIM	IC
IC3	SN74HC4066NS	IC
IC4	LM6171BIM	IC
IC5	M52992FP	IC
IC6	SN74HC14NS20	IC
IC7	SN74HC04NS20	IC
IC8	TC7S14F	IC
IC9	TC7S14F	IC
IC10	SN74HC14NS20	IC
	OTHERS	
	PBAPX2826045	CCD Board
	PBHE25Z	Spacer
CN1	SLD34S-1	Connector 34P
CN2	PBS4B-PH	Connector 4P

RETARD POSITION DETECTOR Board

Ref No.	Part No.	Description
	RESISTORS	
R503	ERDS2TJ331	C 330, J, 1/4W
R504	ERDS2TJ103	C 10k, J, 1/4W
	CAPACITOR	
C502	RPE132F104	Capacitor
	TRANSISTOR	
Q502	2SC3311A	Transistor
	IC	
IC502	TLP832	Photointerrupter
	OTHERS	
	PBAPX2836045	RETARD POSITION SENSOR Board
CN517	PBILS5PS2L2	Connector 5P

DOUBLE FEED DETECTOR (R) Board

Ref No.	Part No.	Description
	RESISTORS	
R533	ERDS2TJ392	C 3.9k, J, 1/4W
R534	ERDS2TJ104	C 100k, J, 1/4W
R535	ERDS2TJ393	C 39k, J, 1/4W
R536	ERDS2TJ823	C 82k, J, 1/4W
R537	ERDS2TJ124	C 120k, J, 1/4W
R538	ERDS2TJ153	C 15k, J, 1/4W
R539	ERDS2TJ822	C 8.2k, J, 1/4W
R540	ERDS2TJ104	C 1000k, J, 1/4W
R541	ERDS2TJ153	C 15k, J, 1/4W
R542	ERDS2TJ102	C 1k, J, 1/4W
	CAPACITORS	
C536	ECQB1H103JF3	P 0.01, J, 50V
C537	ECQV1H104JL3	P 0.1, J, 50V
C538	ECQV1H104JL3	P 0.1, J, 50V
C539	ECQB1H222JF	P 2200p, J, 50V
C540	ECQB1H103JF3	P 0.01, J, 50V
C541	ECQV1H104JL3	P 0.1, J, 50V
C542	ECQB1H103JF3	P 0.01, J, 50V
C543	ECEA1EKS100	E 10, 25V
	DIODE	
D512	MA165	Diode
	IC	
IC507	NJM2082D	Operational Amp.
	OTHERS	
	PBAPX2846045	DOUBLE FEED DETECTOR (R) Board
	PBHRA0201Z	Spacer
CN535	PBILS6PS2T2	Connector 6P
X502	MA40S4R	Diode

DOUBLE FEED DETECTOR (G) Board

Ref No.	Part No.	Description
	RESISTORS	
R528	ERDS2TJ822	C 8.2k, J, 1/4W
R529	ERDS2TJ222	C 2.2k, J, 1/4W
R530	ERDS2TJ103	C 10k, J, 1/4W
R531	ERDS2TJ102	C 1k, J, 1/4W
R532	ERDS2TJ103	C 10k, J, 1/4W
	CAPACITORS	
C535	RPE132F104	Capacitor
C553	ECEA1EKS100	E 10, 25V
C554	ECEA1VKS100	Capacitor
	TRANSISTORS	
Q531	2SC3311A	Transistor
Q532	2SA1309A	Transistor
Q533	2SC3311A	Transistor
Q534	2SC3311A	Transistor
Q535	UN4213	Transistor
	OTHERS	
	PBAPX2856045	DOUBLE FEED DETECTOR (T) Board
	PBHRA0201Z	Spacer
CN534	PBILS8PS2T2	Connector 8P
X501	MA40S4S	Oscillator

STARTING POSITION SENSOR Board

Ref No.	Part No.	Description
	RESISTORS	
R505	ERDS2TJ103	C 10k, J, 1/4W
R506	ERDS2TJ102	C 1k, J, 1/4W
R507	ERDS2TJ223	C 22k, J, 1/4W

STARTING POSITION SENSOR Board (continued)

Ref No.	Part No.	Description
R508	ERDS2TJ222	C 2.2k, J, 1/4W
R509	ERDS2TJ103	C 10k, J, 1/4W
	CAPACITORS	
C503	ECQB1H103JF3	P 0.01, J, 50V
C504	ECQB1H103JF3	P 0.01, J, 50V
C505	RPE132F104	Capacitor
C506	ECEA1EKS100	E 10, 25V
C507	ECBT1H102KB5	E 4.7, 35V
C508	ECBT1H102KB5	E 4.7, 35V
C509	RPE132F104	Capacitor
C571	ECBT1C122MR5	C 1200, 16V
	DIODE	
D515	MA165	Diode
	TRANSISTORS	
Q503	2SA1309A	Transistor
Q504	2SC3311A	Transistor
Q505	PN168	Phototransistor
Q506	2SC3311A	Transistor
	OTHERS	
	PBAPX2866045	TOP SENSOR Board
	PBHRA0055Z	Spacer
CN519	PBILS6PS2L2	Connector 6P
CN520	PBILS7PS2L2	Connector 7P

STARTING POSITION LED Board

Ref No.	Part No.	Description
	DIODE	
D501	TLN119	LED
	OTHERS	
	PBAPX2876045	TOP LED Board
	LH-5-2	Spacer
CN518	S5B-PH	Connector 5P

SIZE SENSOR Board

Ref No.	Part No.	Description
	RESISTORS	
R510	ERDS2TJ103	C 10k, J, 1/4W
R511	ERDS2TJ103	C 10k, J, 1/4W
R512	ERDS2TJ103	C 10k, J, 1/4W
R513	ERDS2TJ103	C 10k, J, 1/4W
R514	ERDS2TJ103	C 10k, J, 1/4W
R515	ERDS2TJ103	C 10k, J, 1/4W
R516	ERDS2TJ103	C 10k, J, 1/4W
R517	ERDS2TJ103	C 10k, J, 1/4W
R518	ERDS2TJ103	C 10k, J, 1/4W
	CAPACITORS	
C510	ECBT1H102KB5	E 4.7, 35V
C511	ECBT1H102KB5	E 4.7, 35V
C512	ECBT1H102KB5	E 4.7, 35V
C513	ECBT1H102KB5	E 4.7, 35V
C514	ECBT1H102KB5	E 4.7, 35V
C515	ECBT1H102KB5	E 4.7, 35V
C516	ECBT1H102KB5	E 4.7, 35V
C517	ECBT1H102KB5	E 4.7, 35V
C518	ECBT1H102KB5	E 4.7, 35V
C519	ECBT1H102KB5	E 4.7, 35V
C520	ECBT1H102KB5	E 4.7, 35V
C521	ECBT1H102KB5	E 4.7, 35V
C522	ECBT1H102KB5	E 4.7, 35V
C523	ECBT1H102KB5	E 4.7, 35V

Ref No.	Part No.	Description
C524	ECBT1H102KB5	E 4.7, 35V
C525	ECBT1H102KB5	E 4.7, 35V
C526	ECBT1H102KB5	E 4.7, 35V
C527	ECBT1H102KB5	E 4.7, 35V
C551	RPE132F104	Capacitor
C552	RPE132F104	Capacitor
C573	ECBT1C122MR5	E 4.7, 35V
C574	ECBT1C122MR5	E 4.7, 35V
C575	ECBT1C122MR5	E 4.7, 35V
C576	ECBT1C122MR5	E 4.7, 35V
C577	ECBT1C122MR5	E 4.7, 35V
C578	ECBT1C122MR5	E 4.7, 35V
C579	ECBT1C122MR5	E 4.7, 35V
C580	ECBT1C122MR5	E 4.7, 35V
C581	ECBT1C122MR5	E 4.7, 35V
	TRANSISTORS	
Q507	PN168	Phototransistor
Q508	2SC3311A	Transistor
Q509	PN168	Phototransistor
Q510	2SC3311A	Transistor
Q511	PN168	Phototransistor
Q512	2SC3311A	Transistor
Q513	PN168	Phototransistor
Q514	2SC3311A	Transistor
Q515	PN168	Phototransistor
Q516	2SC3311A	Transistor
Q517	PN168	Phototransistor
Q518	2SC3311A	Transistor
Q519	PN168	Phototransistor
Q520	2SC3311A	Transistor
Q521	PN168	Phototransistor
Q522	2SC3311A	Transistor
Q523	PN168	Phototransistor
Q524	2SC3311A	Transistor
	OTHERS	
	PBAPX2886045	SIZE SENSOR Board
	PBHRA0055Z	Spacer
CN521	DF11-16DP2DS	Connector 16P

SIZE LED Board

Ref No.	Part No.	Description
	DIODES	
D502	TLN119	LED
D503	TLN119	LED
D504	TLN119	LED
D505	TLN119	LED
D506	TLN119	LED
D507	TLN119	LED
D508	TLN119	LED
D509	TLN119	LED
D510	TLN119	LED
	OTHERS	
	PBAPX2896045	SIZE LED Board
	PBHRA0055Z	Spacer
CN524	DF11-10DP2DS	Connector 10P

ENDING POSITION SENSOR Board

Ref No.	Part No.	Description
	RESISTOR	
R527	ERDS2TJ103	C 10k, J, 1/4W

ENDING POSITION SENSOR Board (continued)

Ref No.	Part No.	Description
	CAPACITORS	
C532	ECBT1H102KB5	E 1000p, 50V
C533	RPE132F104	Capacitor
C534	ECBT1H102KB5	E 1000p, 50V
C572	ECBT1C122MR5	E 1200p, 50V
	TRANSISTORS	
Q529	PN168	Phototransistor
Q530	2SC3311A	Transistor
	OTHERS	
	PBAPX2906045	EXIT SENSOR Board
	LH-5-2	Spacer
CN531	PBB7B-PH	Connector 7P
CN532	B8B-PH	Connector 8P

ENDING POSITION LED Board

Ref No.	Part No.	Description
	DIODE	
D511	TLN119	LED
	OTHERS	
	PBAPX2916045	EXIT LED Board
	PBHMA0170Z	Ground Plate
	PBHRA0055Z	Spacer
CN525	S5B-PH	Connector 6P
CN526	PBS4B-PH	Connector 4P

RELAY (SIDE) Board

Ref No.	Part No.	Description
	RESISTOR	
R561	ERDS2TJ101	C 100, J, 1/4W
	CAPACITOR	
C555	ECQV1H474JL3	P 0.47, J, 50V
	OTHERS	
	PAUX37802	
	PBAPX2926045	RELAY (SIDE) Board
CN509	DF1124DP2DSA	Connector 24P
CN510	DF11-10DPDSA	Connector 10P
CN511	ILS7PS2T2EF	Connector 7P
CN512	B8B-PH	Connector 8P
CN514	ILS5PS2T2EF	Connector 5P

HOPPER HOME SENSOR Board

Ref No.	Part No.	Description
	RESISTORS	
R525	ERDS2TJ331	C 330, J, 1/4W
R526	ERDS2TJ103	C 10k, J, 1/4W
	CAPACITOR	
C531	RPE132F104	Capacitor
	TRANSISTOR	
Q528	2SC3311A	Transistor
	IC	
IC506	TLP832	Photointerrupter
	OTHERS	
	PBAPX2936045	HOPPER HOME SENSOR Board
CN529	5597-04APB	Connector 4P
CN530	PBB7B-PH	Connector 7P

DOCUMENT DETECTOR Board

Ref No.	Part No.	Description
	CAPACITOR	
C570	RPE132F104	Capacitor
	IC	
IC511	RPR359FM	IC
	OTHERS	
	PBAPX2956045	DOCUMENT DETECTOR Board
	LH-5-2	Spacer
CN537	5597-04APB	Connector 4P
CN538	PBS4B-PH	Connector 4P

DOCUMENT COVER SENSOR Board

Ref No.	Part No.	Description
	RESISTORS	
R521	ERDS2TJ331	C 330, J, 1/4W
R522	ERDS2TJ103	C 10k, J, 1/4W
	CAPACITOR	
C529	RPE132F104	Capacitor
	TRANSISTOR	
Q526	2SC3311A	Transistor
	IC	
IC504	TLP832	Photointerrupter
	OTHERS	
	PBAPX2976045	DOCUMENT COVER Board
CN527	PBB4B-PH	Connector 4P

RELAY (BACK) Board

Ref No.	Part No.	Description
	RESISTORS	
R519	ERDS2TJ331	C 330, J, 1/4W
R520	ERDS2TJ103	C 10k, J, 1/4W
	CAPACITORS	
C528	RPE132F104	Capacitor
C582	RPE132F104	Capacitor
C583	RPE132F104	Capacitor
C584	RPE132F104	Capacitor
C585	RPE132F104	Capacitor
C586	RPE132F104	Capacitor
	TRANSISTOR	
Q525	2SC3311A	Transistor
	IC	
IC503	TLP832	Photointerrupter
	OTHERS	
	PBAPX2996045	RELAY (BACK) Board
CN501	28FMZ-BT	Connector 28P
CN502	PBILS8PS2T2	Connector 8P
CN503	DF11-12DP2DS	Connector 12P
CN504	26FMZ-ST	Connector 26P
CN505	DF11-24DP2DS	Connector 24P
CN513	S6B-PH	Connector 6P
CN515	S5B-PH	Connector 5P
CN522	DF1116DP2DSA	Connector 16P

POWER Board

Ref No.	Part No.	Description
	RESISTORS	
R801	ERDS1TJ105	C 1000k, J, 1/2W
R802	ERDS1TJ184	C 1000k, J, 1/2W
R803	ERDS1TJ184	C 180k, J, 1/2W
R806	ERDS2TJ333	C 33k, J, 1/4W
R809	MPC710.18K	Resistor
R810	ERDS2TJ5R6	C 5.6, J, 1/4W
R811	ERDS1TJ330	C 33, J, 1/2W
R812	ERDS2TJ222	C 2.2k, J, 1/4W
R813	ERG2SJ100P	M 10, J, 2W
R815	ER0S2TKF4701	M 4.70k, F, 1/4W
R816	ERDS2TJ103	C 10k, J, 1/4W
R817	ERDS2TJ333	C 33k, J, 1/4W
R818	ERDS2TJ681	C 680, J, 1/4W
R820	ERG2SJ150P	M 15, J, 2W
R821	ERG2SJ104	M 100k, J, 2W
R825	ERDS1TJ473	C 47k, J, 1/2W
R826	ERDS1TJ473	C 47k, J, 1/2W
R832	ERDS2TJ103	C 10k, J, 1/4W
R833	ERDS2TJ103	C 10k, J, 1/4W
R841	ERDS1TJ472	C 4.7k, J, 1/2W
R843	ER0S2TKF9101	M 9.10k, F, 1/4W
R844	ER0S2TKF1001	M 1k, F, 1/4W
R845	ERDS2TJ102	C 1k, J, 1/4W
R846	ERDS2TJ121	C 120, J, 1/4W
R847	ERDS2TJ102	C 1k, J, 1/4W
R848	ERDS2TJ121	C 120, J, 1/4W
R851	MPC710,1K	Resistor 5W
R852	ERDS2TJ272	C 2.7k, J, 1/4W
R853	ERDS2TJ103	C 10k, J, 1/4W
R854	ERDS2TJ121	C 120, J, 1/4W
R855	ERDS2TJ103	C 10k, J, 1/4W
R856	ER0S2TKF3301	M 3.30k, F, 1/4W
R857	ER0S2TKF1101	M 1.10k, F, 1/4W
R858	ERDS2TJ330	C 33, J, 1/4W
R859	ERDS2TJ390	C 39, J, 1/4W
R861	ERX12SJR33	M 33, J, 1/2W
R862	ER0S2TKF4701	M 4.70k, F, 1/4W
R863	ER0S2TKF1001	M 1k, F, 1/4W
R871	ERDS2TJ470	C 47, J, 1/4W
R872	ERDS2TJ103	C 10k, J, 1/4W
R873	ERDS2TJ332	C 3.3k, J, 1/4W
R874	ERG1SJ470P	M 47, J, 1W
R875	ERDS2TJ472	C 4.7k, J, 1/4W
R876	ERDS2TJ120	C 12, J, 1/4W
R881	ERX12SJR33	M 33, J, 1/2W
R882	ER0S2TKF1001	M 1k, F, 1/4W
R883	ER0S2TKF4701	M 4.70k, F, 1/4W
	CAPACITORS	
C801	PA224-ZC	P 0.22, AC 125V ⚠
C802	ECKATS222ME	Capacitor ⚠
C803	ECKATS222ME	Capacitor ⚠
C804	PA224-ZC	P 0.22, AC 125V ⚠
C805	250SXR470-30	E 470, 250V ⚠
C806	250SXR470-30	E 470, 250V ⚠
C807	50YXF10M	C 10, 50V
C809	50YXF47M	E 47, 50V
C810	ECQB1H391JF3	P 390p, J, 50V
C811	ECQV1H224JL	P 0.22, J, 50V
C813	ECKATS103MF	Capacitor ⚠
C814	ECQB1H682JF3	P 6800p, J, 50V
C815	ECQB1H473JF3	P 0.047, J, 50V
C816	ECA2GHG4R7	E 4.7, 35V
C817	ECQE4103KF3	Capacitor
C818	ECQE6154KF	Capacitor
C825	ECA1HHG2R2	E 2.2, 50V
C830	ECKD3A101KB	C 100p, K, 1kV
C831	ECQV1H104JL3	P 0.1, J, 50V
C833	35YXF220MT8	C 220, 35V
C841	35YXF2200MKC	E 2200, 35V

Ref No.	Part No.	Description
C843	ECQV1H104JL3	P 0.1, J, 50V
C844	ECQV1H104JL3	P 0.1, J, 50V
C851	35YXF2200MKC	E 2200, 35V
C852	10YXF1000MT8	C 1000, 10V
C853	ECQB1H472JF	P 4700p, J, 50V
C854	ECKD3A101KB	C 100p, K, 1kV
C855	ECQV1H104JL3	P 0.1, J, 50V
C856	35YXF220MT8	C 220, 35V
C857	35YXF220MT8	C 220, 35V
C858	10YXF1000MT8	C 1000, 10V
C859	ECKD3A221KBP	C 220p, K, 1kV
C870	50YXF33M	E 33, 50V
C871	50YXF10M	E 10, 50V
C881	35YXF220MT8	C 220, 35V
C882	10YXF1000MT8	C 1000, 10V
C884	ECKD3A221KBP	C 220p, K, 1kV
C886	35YXF220MT8	C 220, 35V
	COILS	
L801	ELF15N017A	Coil ⚠
L802	ELF15N017A	Coil ⚠
L803	ETQR37C006A	FL Transformer ⚠
L842	AB4-2-4.5W	Amorphous Bead
L843	AB4-2-4.5W	Amorphous Bead
L851	HK10S080-121	Common-mode Choke Coil
L852	RCH110-221K	Choke Coil
L881	RCH110-221K	Choke Coil
	DIODES	
D801	D3SBA60-4101	Brige Diode ⚠
D804	ERA91-02	Diode
D806	RD27ESAB4	Zener Diode
D807	ERA91-02	Diode
D808	ERB44-10G1	Diode
D810	RD5.1ESAB2	Zener Diode
D816	ERB44-10G1	Diode
D833	MA165	Diode
D841	10DL2CZ47A	Diode
D843	MA165	Diode
D844	RD27ESAB4	Zener Diode
D850	1GWJ43	Diode
D851	YG802C06R	Diode
D853	MA165	Diode
D854	RD5.1ESAB2	Zener Diode
D855	MA165	Diode
D856	RD12ESAB3	Zener Diode
D857	MA165	Diode
D858	MA165	Diode
D859	RD5.1ESAB2	Zener Diode
D863	MA165	Diode
D864	RD12ESAB3	Zener Diode
D866	MA165	Diode
D870	MA165	Diode
D871	MA165	Diode
D872	D1N60	Diode
D881	1GWJ43	Diode
D882	RD5.1ESAB2	Zener Diode
D885	MA165	Diode
D886	MA165	Diode
D887	RD5.1ESAB2	Zener Diode
	TRANSISTORS	
Q801	2SK2651-01MR	Power MOS FET ⚠
Q851	2SJ175	Power MOS FET
Q852	2SD1423A-SR	Transistor
Q870	2SC3311A	Transistor
	ICs	
IC801	FA5311PA	IC
IC802	MK1210-4105	IC ⚠
IC831	UPC2933HF	IC

POWER Board (continued)

Ref No.	Part No.	Description	
IC832	UPC1944J	Shunt Regulator	
IC841	HA17431PA	Shunt Regulator	
IC851	MC34063AP1	Switching Regulator	
IC852	NJM78M05FA	IC	
IC853	NJM2360AD	IC	
IC881	NJM2360AD	IC	
IC882	NJM79M05FA	IC	
	OTHERS		
	PBAPX3276045	POWER Board	⚠
	PBMYA0011Z	Heat Sink	
	TJC6320	Fuse Holder	
	FA35-9051	Insulate Sheft	
	PAUX37802	Ground Lug	
	PH-0124C-M	Heat Sink	
	XNG3BFX	Nut	
	XYN3+8JFX	Screw	
	XYN3+J10FX	Screw	
CN801	B2P3-VH	Connector 2P	
CN843	B04B-XASK-1	Connector 4P	
CN851	B09B-XASK-1	Connector 9P	
CN871	B3B-EH	Connector 3P	
F801	PB2153.15	Fuse	⚠
F841	PB215004	Fuse	⚠
PC801	PC123FY2	Photocoupler	⚠
PC802	PC123FY2	Photocoupler	⚠
SA801	DSAZR2-362M	Surge Absorber	⚠
T801	ETS29AH1A5AC	FL Transformer	⚠
TH801	N100L12325JF	Resistor	⚠
Z851	ICP-N50T104	IC Protector	
Z852	ICP-N50T104	IC Protector	
Z881	ICP-N50T104	IC Protector	
ZNR801	470NS10D-K0	Varistor	⚠
ZNR802	240NS10D-301	Varistor	⚠
ZNR803	240NS10D-301	Varistor	⚠
ZNR804	240NS10D-301	Varistor	⚠
ZNR806	470NS10D-K0	Varistor	⚠